
BY THE HOUSE DELEGATES,

February 7th, 1846.

Read and ordered to be printed.

COMMUNICATION

FROM THE

STATE AGENTS OF MARYLAND,
TRANSMITTING THE RECORDS OF PROCEEDINGS OF
THE STOCKHOLDERS OF THE
CHESAPEAKE & OHIO CANAL COMPANY,

Which have been had and entered into since their last report to
the Legislature.

To the Honorable,

The Legislature of Maryland:

In compliance with the requirements of the 4th section of the act of Assembly, passed at the December session of 1840, chapter 155, the undersigned have the honor herewith, to transmit to your honorable body a full transcript of the records of all the proceedings of the stockholders of the Chesapeake and Ohio Canal Company, which have been had and entered into since their last report to the Legislature.

All of which is respectfully submitted,

SAMUEL SPRIGG,

TENCH TILGHMAN,

On behalf of the Agents of Maryland.

A general meeting of the stockholders of the Chesapeake and Ohio Canal Company, duly convened agreeably to the charter of said company, was held on the 29th of April, 1845, at the office of said company in the city of Frederick, to take into consideration the expediency of accepting an act of the legislature of Maryland, passed at its last session, entitled "An act to provide for the completion of the Chesapeake and Ohio Canal to Cumberland, and for other purposes," and also an act entitled, "an act to amend the act incorporating the Chesapeake and Ohio Canal Company," passed by the Legislature of Virginia on the 20th day of January, 1844, confirmed by the Legislature of Maryland by

an act passed on the 8th February, 1844, and assented to by the Congress of the United States during the session just closed.

On motion, Governor SAMUEL SPRIGG, of Maryland, was called to the Chair, and THOMAS TURNER, was appointed Secretary.

The list of Stockholders having been called over;

On motion, the Chairman appointed Messrs. Ingle, Van Lear and Washington, a committee to examine the various proxies, and report thereon.

The said committee having performed the duty assigned them, reported the following stockholders to be duly and regularly represented in this meeting, viz:

The United States—By Colonel J. J. Abert.

The State of Maryland—By Governor Samuel Sprigg, Allen B. Davis, John Van Lear, and William T. Goldsborough, Esqrs., State Agents.

The State of Virginia—By James L. Ranson, Esq.

The Corporation of Washington—By W. W. Seaton and Lewis Johnson, Esquires.

The Corporation of Georgetown—By William S. Nicholls, Samuel McKenney and Evan Lyons, Esquires.

The Corporation of Alexandria—By Phineas Janney, Robert M. Miller and William H. Fowle, Esquires.

The Corporation of Shepherdstown—By James L. Ranson, Esq.

In addition to the above, there were several individual stockholders represented by proxy, and numerous stockholders personally present; in all, constituting the representation of a large majority of the stock of said company.

JAMES M. COALE, Esq., the President of the company, on behalf of the President and Directors, presented and read a report to the meeting in regard to the objects for which it was convened.

(A printed copy of this report together with the accompanying documents is herewith submitted, marked A.)

After which, he presented and laid before the meeting authenticated copies of the following acts, viz:

An act entitled, "an act to amend the act incorporating the Chesapeake and Ohio Canal Company," passed by the Legislature of Virginia on the 20th January, 1844.

An act entitled, "an act to confirm an act of the General Assembly of the State of Virginia," and passed by the Legislature of Maryland, on the 8th February, 1844.

An act entitled, "an act confirming and assenting to an act of the Legislature of Virginia," and passed by the Congress of the United States, and approved by the President on the 7th day of February, 1845.

Also an act of the Legislature of Maryland, entitled, "an act to provide for the completion of the Chesapeake and Ohio Canal to Cumberland, and for other purposes."

Whereupon J. Van Lear, Esq., submitted the following resolution:

Resolved by the Stockholders of the Chesapeake and Ohio Canal Company in General Meeting assembled, That the act entitled, "an act further to amend the act incorporating the Chesapeake and Ohio Canal Company," which was passed by the Legislature of Virginia on the 20th day of January, 1844, confirmed by the Legislature of Maryland, on the 8th day of February of the same year, and assented to by the Congress of the United States, approved by the President on the 7th day of February, 1845, be, and the same is hereby, accepted and assented to, and declared to be in full force as a part of the charter of this company.

The question being taken, the above resolution was *unanimously* adopted.

James L. Ranson, Esq., then offered the following resolutions:

Resolved by the Stockholders of the Chesapeake and Ohio Canal Company in General Meeting duly assembled, That the provisions of the act entitled, "an act to provide for the completion of the Chesapeake and Ohio Canal to Cumberland, and for other purposes," passed by the Legislature of Maryland, at its December session, 1844, chapter 282, be, and the same are hereby, approved, assented, and agreed to; and that such approval, assent, and agreement, under the corporate seal and the signature of the President of this company, be communicated to the Treasurer of the Western Shore of said State, in conformity with the 9th section of the said act.

Resolved, That a further mortgage to the State of Maryland be executed by this company and delivered to the Treasurer of the Western Shore of said State, on the canal, its lands, tolls, and revenues, subject nevertheless, to the liens and pledges made, created, or authorised by the said act of 1844, chapter 282, as an additional security for the payment of the loan made by the said State to this company, under the act of December session, 1834, chapter 241, and the interest due, and in arrear, and which may hereafter accrue thereon, in compliance with the 7th section of the first mentioned act of 1844, chapter 282.

The said resolutions were read; and the question having been taken, they were *unanimously* adopted.

The meeting, then on motion, was adjourned *sine die*.

(Signed.) SAMUEL SPRIGG, Chairman.

THOMAS TURNER, Secretary.

MONDAY, JUNE 2nd, 1845.

In conformity with the charter of the Chesapeake and Ohio Canal Company, the stockholders held their 17th Annual General Meeting, at the office of said company, in the city of Frederick, Maryland, this day.

On motion Governor SAMUEL SPRIGG, was appointed Chairman and THOMAS TURNER, Secretary.

The Stockholders having been called, on motion the Chair appointed Messrs. J. P. Ingle, Samuel McKehney, and Phineas Janney, a committee to examine and report upon the various proxies.

The committee having discharged the duty assigned them reported the following stockholders to be duly and regularly represented, viz:

The State of Maryland—By Governor S. Sprigg, General T. Tilghman, A. Bowie Davis, John Van Lear and William T. Goldsborough, Esquires.

The State of Virginia—By J. L. Ranson, Esq.

The Corporation of Alexandria—By P. Janney, R. H. Miller and W. H. Fowle, Esquires.

The Corporation of Georgetown—By John Kurtz, S. W. Kenney and William S. Nicholls, Esquires.

The Corporation of Shepherdstown—By James L. Ranson, Esquire.

In addition to the foregoing numerous individual stockholders were present in person, in all constituting a large majority of the stock of the company.

Col. JAMES M. COALE, President of the company, presented and read in behalf of the President and Directors their 17th Annual Report.

(A printed copy of this report together with the accompanying documents is herewith submitted marked B.)

The reading of the report having been finished, on motion of Phineas Janney, Esq., it was

Ordered, That the said report be received and printed.

On motion of General T. Tilghman, it was further

Ordered, That the report with the accompanying papers be referred to a committee of five to be selected by the chair.

The chair named the following to compose the committee:—General T. Tilghman, J. Kurtz, R. H. Miller, W. S. Nicholls and C. W. Wever.

On motion the meeting was then adjourned until to-morrow morning at 8 o'clock.

TUESDAY, June 3rd, 1845.

According to the adjournment on yesterday, the Stockholders of the Chesapeake and Ohio Canal Company met again this morning in general meeting.

The meeting being called to order by the chair, and the same representation of stock being present as on yesterday;

Gen. T. Tilghman moved a reconsideration of the order adopted yesterday, ordering the reception and printing of the Report of the President submitted and read yesterday.

And the question being taken, the motion was rejected, as follows:

AYES.—The Corporation of Alexandria, - 508 votes.
 “ “ Georgetown, - 508 “

1,016 “

NAYS.—The State of Maryland, - 10,290 votes.

Gen. Tilghman, from the committee to whom was referred on yesterday the report and accompanying papers submitted to the meeting by the President of this company, presented and read the following report:

*To the Stockholders of the Chesapeake
 and Ohio Canal Company:*

GENTLEMEN—The committee to whom was referred the 17th Annual Report of the President and Directors of the Chesapeake and Ohio Canal Company, together with the accompanying documents, have the honor to report—that they proceeded at once to the performance of the duty assigned to them, and have made a careful examination of that portion of the documents referred to them, which relates more particularly to the general business of the company. They have also made as minute an investigation of that portion of said documents which contains an account of the financial operations of the company as the shortness of the time allotted to them would permit.

Your committee are happy to have it in their power to bear evidence to the wholesome condition of the affairs of the company, as evinced by said documents so far as relates to the finished portion of said work.

They approve of the plan which has been adopted for the prevention of breaches on the canal, and recommend that it be used wherever it may be necessary throughout the entire line of the work.

The excellent condition of the canal in reference to repairs affords the best proof of the gratifying fact, that in progress of time and in consequence of the necessary repairs, the work has become more perfect and substantial and less liable to accident or injury; and proves conclusively, that in future there will be a diminution of expenses for repairs, instead of an increase as in the case of works of a different character. This fact is particularly gratifying when taken in connection with the increased amount of business on the canal—an increase which has taken place at the time of a return to a cash system of tolls, and cannot be attributed to any fictitious cause whatever.

But however prosperous may be the condition of that portion of the business of the company which is confined to those sections of the canal already completed and now in active operation, your committee feel that they cannot dwell any longer on this branch of the subject, without rendering themselves liable to the charge of bestowing an undue degree of importance on matters, which in their estimation, are of trifling import when compared with others, which at this time engross the attention not only of this company,

but of the people of Maryland and a large portion of the whole country.

The completion of the canal to Cumberland is justly regarded by all as the object of paramount importance, and until this shall have been effected, it may truly be said that little comparatively has been done.

The favorable action of the Congress of the United States and of the Legislatures of Virginia and Maryland, in the passage of the several acts contained in the documents before us, was calculated to excite the brightest hopes in the friends of our great enterprize; and the gratifying assurance contained in the report of the President on the 29th of April, in reference to the speedy execution of the guarantees required by the law of Maryland, especially by the mining companies, (on the transportation of whose produce must depend in a great degree the profitable use of the canal when completed,) had induced your committee to indulge the expectation that some information of a definite character would be laid before them at the present meeting on this deeply interesting subject. They cannot withhold the expression of their regret at the disappointment which they have experienced in this respect.

In the absence, however, of more definite information, they are happy to see the entire confidence which is manifested by the President and Directors of the company in the speedy accomplishment of the objects contemplated in the law above referred to.

The implicit reliance which your committee repose in the sincerity of those to whom the immediate management of the affairs of the company is intrusted, convinces them that they at least have no doubt of their own ability to carry out the provisions of the law, more especially as they have named an early day, viz: the middle of this month, as the time by which the guarantees will be executed; and as the committee are fully aware of the difficulty of imparting definite information during the progress of a negotiation, they dismiss the subject with the expression of an earnest hope, that nothing may occur to disappoint the gratifying expectations which are now so confidently entertained by those who have charge of the affairs of the company.

The most unpleasant portion of the duty, which you have imposed on your committee, yet remains to be performed, and they cannot withhold the expression of their deep regret, at what appears to be a violation of good faith on the part of the Baltimore and Ohio Rail Road Company, in their recent action, in reference to the freights on coal and iron between Cumberland and Dam No. 6. They cannot, however, believe that the rail road company would have resorted to such a measure for the sole purpose of injuring the canal, and unless they had also been influenced by an actual inability to comply with the arrangements, which they had entered into without loss to themselves.

Your committee entertain the opinion that the proper business of this road is the transportation of passengers, and merchandize between the two great sections of the country and between the

mining district and the markets on tidewater. And they feel bound to express their dissent from the views entertained by this company and others in reference to the ability of such roads to compete with canals in the transportation of heavy articles. They have strong doubts of the ability of rail roads to transport coal and iron at a rate of freight commensurate with the profits on those articles, and at a remunerating profit to themselves and they have entertained the opinion from the first that the arrangement between the canal and rail road companies for the joint transportation of coal and iron on the two works could not be carried out by the rail road in such a manner as to be productive of important benefit to the canal, or to be acceptable to any great extent, to those, who are engaged in the transportation of those articles. The evidence, on which this opinion is founded, derived from the experience of other and similar works in this and other countries is abundant. The want of time, however, does not admit of its introduction in this report.

Your committee regard the increase of freights on that portion of the rail road above Dam No. 6, as an evidence that a similar increase will be found necessary along the whole line of the road; and they look with confidence to the occurrence of this circumstance for the most undeniable proof of the fact, that the interests of these two great corporations, are not conflicting but identical.

They would expressly repudiate the idea, that their either is or can be any permanent cause of controversy, or rivalry, between these two great companies; and they would have preferred to have avoided altogether any reference to such an idea; they hope however that a sufficient excuse for its introduction will be found in an apprehension of the existence of erroneous impressions in reference to a collision of interests between two great works, leading from the same point in the interior, and both communicating with the seaboard, but each of them calculated and intended to perform important and different functions in achieving a great common object, viz: the development of the almost unlimited resources of the richest mineral region in the world.

In conclusion, your committee have only to say, that it is impossible to complete the examination of the accounts of the company in time to report to this meeting, and they would respectfully request that further time be allowed them to conclude their report.

All which is respectfully submitted,

TENCH TILGHMAN,

On behalf of the Committee.

FREDERICK, JUNE 3rd, 1845.

The reading of the report being finished;

J. H. Alexander, Esq., moved that the report be received and printed.

Before the question was taken, on motion of A. Bowie Davis, Esq., it was

Ordered, That the meeting take a recess of half an hour.

The recess having expired the meeting was again called to order by the chair.

J. P. Ingle, from the committee appointed yesterday to examine and report upon proxies reported that, in addition to those reported upon yesterday, Lewis Johnson, Esq., had exhibited to the committee evidence to satisfy them that said Johnson was duly and regularly constituted the representation of the corporation of Washington.

The motion of J. H. Alexander, Esq., was then called for consideration, and on motion of A. Bowie Davis, Esq., was amended so as to include the proceedings of this meeting.

The question being then taken on the motion as amended it was

Ordered, That the report of the committee be received and that it together with the proceedings of this meeting be printed.

On motion of Samuel McKenney, Esq., it was

Ordered, That the committee be allowed further time for the examination of the accounts of the company and that they report thereon at a subsequent meeting.

On motion it was

Ordered, This meeting do now proceed to the election of the President and six Directors of this company, for the ensuing year, or until successors shall be appointed. That the chair appoint a committee to receive and count the votes and that for that purpose a recess of half an hour be allowed.

Before the chair announced the committee, on motion of R. H. Miller, Esq., it was

Ordered, That this meeting do now adjourn to meet again on Tuesday the 22nd day of July next.

(Signed.) SAMUEL SPRIGG, Chairman.

THOMAS TURNER, Secretary.

True copy,

THOMAS TURNER, Secretary.

TUESDAY, July 22d, 1845.

The stockholders of the Chesapeake and Ohio Canal Company, pursuant to adjournment on the 3rd of June last, met in General Meeting this day at the office of the said company in the city of Frederick.

On motion, Governor SPRIGG took the chair and called the meeting to order.

The Secretary having called over the list of stockholders there appeared a large majority of the stock to be represented.

On motion of Mr. Davis.

The chair appointed Messrs. J. Kurtz, C. W. Wever, and W. M. Stewart a committee to examine and report upon the proxies.

The committee having discharged the duty reported the following stock to be duly represented, to wit:

The State of Maryland—By Governor S. Sprigg, Tench Tilghman, A. Bowie Davis and John Van Lear, Esquires.

The United States—By Col. J. J. Abert.

The Corporation of Washington—By Lewis Johnson, Esq.

The Corporation of Alexandria—By R. H. Miller, Esq.

The Corporation of Georgetown—By Clement Cox, William S. Nicholls and John Kurtz, Esquires.

Walter H. Smith—By W. B. Thompson.

Frisby Tilghman and Frederick A. Schley—By William Cost Johnson.

Joseph Dilley—By Thomas J. McKaig.

In addition to the foregoing there were numerous individual stockholders personally present in all constituting a large majority of the stock of said company.

General Tilghman from the committee to whom was referred on the 2nd day of June last the report of the President and Directors of the Chesapeake and Ohio Canal Company, &c., presented the following as an additional report:

The committee to whom were referred the 17th Annual Report of the President and Directors of the Chesapeake and Ohio Canal Company, together with the accompanying documents having previously made a report upon the first portion of the duties assigned to them, beg leave to present this additional report on the second branch of the subject submitted to their consideration.

Your committee have examined the transactions of the company during the past year as shown by the accounts and vouchers, and found them to be correct.

They are of opinion that the books have been kept with neatness and accuracy, but they would suggest a change in the mode of keeping the accounts in the following respects.

They find that under the directions given to the Treasurer, and in accordance with the custom which has heretofore prevailed in the company, payments have been made for more than one purpose on the same warrant and the whole payment charged under the head of the principal item for which the warrant was drawn.

In consequence of this circumstance the abstract of receipts into, and payments from the Treasury, being No. 4, of the Appendix, instead of exhibiting the actual condition of the affairs of the company in its items as well as in its final balance, only shows the amount charged on the Treasurer's books, under each head in the abstract, instead of the whole amount of expenses properly chargeable under that head. Thus under the head of pay of Lock-keepers, it appears by the abstract that the amount paid in 1845, was \$627, whereas by reference to the accounts of the company it is found that the whole amount properly chargeable under this head is \$7,801.00.

Your committee would also suggest that hereafter the abstract for the year should show the whole amount of revenue and expenses and also the whole amount of actual receipts and payments,

each arranged under their proper heads. They would further recommend, that the abstracts, above referred to, should in all cases contain a brief explanation of the items contained in them. Thus for instance under the head of receipts from law expenses, it should be stated that they were for costs refunded; and under the head of profit and loss the large item of \$10,054.96, would present a more favorable appearance, and not be liable to misconstruction if it were explained as the loss incurred on the sales of coupons and Maryland bonds below their par value.

With these suggestions your committee would respectfully conclude their report.

In behalf of the committee,

TENCH TILGHMAN, Chairman.

On motion of J. Van Lear, Esq., it was

Ordered, That the report be accepted and laid upon the table.

The President presented and read the following report:

(This report relates entirely to the prospect of obtaining the guarantees and required no action on the part of the agents.)

The reading of the report having been finished;

On motion of Clement Cox, Esq., it was

Ordered, That this meeting do now adjourn until to-morrow morning at 8 o'clock.

WEDNESDAY, JULY 23rd, 1845.

Pursuant to adjournment yesterday the stockholders of the Chesapeake and Ohio Canal Company met this morning.

Present the same as on yesterday.

Governor Sprigg took the chair and called the meeting to order.

The President of this company being present, stated that the Maryland Mining Company, by the agency of the committee referred to in his report of yesterday, had this morning delivered a guaranty, &c., for 20,000 tons which added to those previously received by the company, and referred to yesterday, make the aggregate tonnage secured according to the provisions of the law, &c., to exceed the 195,000 tons as required; and that he proposed submitting the entire amount of guaranties, for the approval of the Governor and State agents, immediately after the adjournment of this meeting;

On motion of Mr. Davis, it was

Ordered, That the meeting now proceed to the election of President and Directors of this company, until the first Monday in June next, or until others shall be appointed to succeed them, that being the business before the meeting on the 3rd ult. when the meeting was adjourned.

The Chairman appointed, in conformity with the order of the 3rd of June, Clement Cox, J. J. Abert and R. H. Miller, Esqrs. the committee to receive and count the ballots.

The following gentlemen were then nominated, viz:

For President—Col. JAMES M. COALE.

For Directors—Col. Frisby Tilghman, D. Burkhart, J. P. Ingle, R. W. Bowie, J. O. Wharton, and Wm. Price, Esquires.

Whereupon, on motion, it was

Ordered, That this meeting take a recess for half an hour, to enable the committee to count the ballots and make their report.

The half hour having expired, the Chairman called the meeting to order.

Mr. Cox, on behalf of the committee presented the following report :

* OFFICE OF THE CHESAPEAKE & OHIO CANAL Co.,

Frederick, July 23rd, 1845.

The undersigned having been appointed a committee to receive and count the votes for President and Directors of the Chesapeake and Ohio Canal Company, for the ensuing year or until others shall be appointed to succeed them, report :

That the whole number of votes cast was fifteen thousand three hundred and forty-two.

Of which number, for the office of President James M. Coale, received fifteen thousand three hundred and forty-two votes.

And for the office of Directors, D. Burkhart, J. P. Ingle, William Price, F. Tilghman, and J. O. Wharton, each received 15,342 votes. Robert W. Bowie received 15,322 votes and Lewis Johnson received 10 votes.

And James M. Coale having received a majority of the votes so cast for the office of President and D. Burkhart, J. P. Ingle, Wm. Price, F. Tilghman, J. O. Wharton and Robert W. Bowie, having likewise received a majority of the votes so cast for the office of Directors are declared to have been duly elected to said offices respectively, for the ensuing year, ending on the first Monday of June, 1846, or until successors shall be appointed.

CLEMENT COX,

J. J. ABERT,

R. H. MILLER,

Committee of Tellers.

The Chairman then declared the gentlemen so to have been duly elected to the office of President and Directors.

On motion of Col. J. J. Abert, the chair appointed Col. J. J. Abert, C. Cox and R. H. Miller, Esquires, a committee to notify the gentlemen of their election, &c.

On motion of General T. Tilghman, it was

Resolved, That no previous action of the stockholders shall be so construed as to prevent the President and Directors of the Chesapeake Ohio Canal Company from making arrangements for the completion of the canal either by public letting, or private contract as may seem to them best calculated to promote the interest and facilitate the completion of the canal.

Col. J. J. Abert, in behalf of the committee appointed to notify the President and Directors of their election to said offices.

Reported, that in discharge of the duty so assigned the com-

mittee, they had in person called upon Col. J. M. Coale, F. Tilghman, D. Burkhart, J. P. Ingle, Wm. Price and J. O. Wharton, they being in Frederick, and notified them of their election to the office of President and Directors. And the said gentlemen signified their willingness to accept of the said offices. That Robert W. Bowie, Esq., not being in Frederick, they had respectfully addressed to him at his residence in Prince George's county, a letter notifying him of his election, and transmitted the same by mail.

On motion of William Cost Johnson, Esq., it was

Ordered, That the Board of President and Directors be authorised to publish such part of the proceedings of this meeting as they may deem proper.

On motion of R. H. Miller, Esq.

Ordered, That this meeting do now adjourn to meet again on the first Monday of September next.

SAMUEL SPRIGG, Chairman.

OFFICE OF THE CHESAPEAKE & OHIO CANAL Co.,

Frederick, Monday Sept. 1st, 1845.

Pursuant to adjournment on the 23rd of July last, the stockholders of the Chesapeake and Ohio Canal Company were convened in general meeting this day.

Present the State of Maryland—By Gov. Samuel Sprigg, John Van Lear and William T. Goldsborough, Esquires.

Col. J. M. Coale, President of the Chesapeake and Ohio Canal Company, presented the following communication.

(This report conveys the information that the guarantees had been received and approved by the Governor and State's Agents. That the President and Directors had advertised for proposals to complete the canal and had received several proposals, but had not acted on them.)

On motion it was

Ordered, That this meeting do now adjourn to meet again at this office on Wednesday, the 17th instant.

(Signed.) SAMUEL SPRIGG, Chairman.

WEDNESDAY, SEPT. 17th, 1845.

This being the day to which, by order of the 1st instant, the stockholders of the Chesapeake and Ohio Canal Company were adjourned. William M. Beall, Esq., one of the stockholders attended, and being the only one present adjourned the meeting to Tuesday the 23rd instant, at 2 o'clock, P. M.

THOMAS TURNER, Secretary.

TUESDAY, September 23, 1845.

The Stockholders of the Chesapeake and Ohio Canal Company met at the office of said company, in the city of Frederick, on this day, pursuant to the adjournment on the 17th instant.

Governor S. Sprigg, on motion, took the Chair.

Present the State of Maryland—by Governor Samuel Sprigg, A. Bowie Davis, John Van Lear and Tench Tilghman, Esquires, and several private stockholders.

On motion, the meeting was adjourned until to-morrow at eight o'clock, A. M.

WEDNESDAY, September 24, 1845.

According to the order of adjournment yesterday, the Stockholders of the Chesapeake and Ohio Canal Company met again in general meeting this day.

On motion, Governor Sprigg took the Chair.

Present the State of Maryland—by Governor Samuel Sprigg, A. Bowie Davis, John Van Lear, and Tench Tilghman, Esqrs.; the Corporation of Georgetown—by Clement Cox, Esq., and Wm. A. Bradley, W. C. Johnson, F. Tilghman, J. P. Ingle and C. Cox, Esqrs., private stockholders.

On motion of Mr. Van Lear, the following resolutions were unanimously adopted:

Resolved, That in consideration of the important services rendered by him during the past year, and of the increased duties devolved upon him, the salary of the President of this company shall be at the rate of three thousand dollars per annum, dating from the 23rd day of July, 1845.

Resolved, That all orders or resolutions heretofore passed in regard to the salary and expenses of the President be and the same are hereby repealed.

On motion, it was

Ordered, That this meeting take a recess till six o'clock this evening.

WEDNESDAY, September 24, 1845,

SIX O'CLOCK, P. M.

The Stockholders of the Chesapeake and Ohio Canal Company met again this evening.

Governor Sprigg took the Chair.

Present the State of Maryland—by the same representatives as present this morning, and several private stockholders.

When, on motion, it was

Ordered, That this meeting adjourn to meet to-morrow at six o'clock, A. M.

THURSDAY, September 25, 1845,

SIX O'CLOCK, A. M.

The Stockholders again assembled this morning pursuant to the order of adjournment last evening.

Present the State of Maryland—by the same representatives present yesterday, and several private stockholders.

Governor Sprigg took the Chair.

On motion,

Ordered, That this meeting do now adjourn to meet on the first Thursday of November next.

SAMUEL SPRIGG, Chairman.

THOMAS TURNER, Secretary.

OFFICE CHESAPEAKE & OHIO CANAL Co.,

Frederick, Thursday, 6th Nov., 1845.

This being the day to which the Stockholders of the Chesapeake and Ohio Canal Company were adjourned on the 25th day of September last, William M. Beall, Esq., one of the stockholders in said company, being alone present, adjourned the meeting until the second Thursday, the 11th day of December next, at two o'clock, P. M.

Test:

THOS. TURNER, Secretary.

OFFICE CHESAPEAKE & OHIO CANAL Co.,

Frederick, December 11, 1845.

Pursuant to the order of adjournment on the 6th ultimo, the Stockholders of the Chesapeake and Ohio Canal Company assembled in general meeting on this day, (the 11th of December,) at the office of the company in the city of Frederick.

Present the State of Maryland—by Governor Samuel Sprigg, Allen Bowie Davis and William T. Goldsborough, Esquires.

On motion, Governor Sprigg took the Chair, and Thomas Turner acted as Secretary.

Letters were read from Gen. Tench Tilghman and John Van Lear, Jr., Esq., the other State's Agents, severally accounting for their absence.

The meeting being duly organized, and a large majority of the stock being represented therein, they proceeded to business.

On motion, it was

Ordered, That the President of the company be requested to state whether any thing had occurred since the last meeting which called for the action of the stockholders, and if so, that he communicate the same in writing.

After a brief interval, the President accordingly presented and read to the meeting the following communication:

OFFICE OF THE CHESAPEAKE & OHIO CANAL CO.

Frederick, December 11th, 1845.

To the Stockholders of the Chesapeake and Ohio Canal Company in adjourned general meeting assembled:

Gentlemen—By the 8th section of the charter of this company, it is provided that “the presence of stockholders, having the major part of the stock at least, shall be necessary to constitute a general meeting of the stockholders, which shall be held on the first Monday of June in every year, at *such convenient town or place, as shall be from time to time appointed by the said general meeting.*”

The first section of the original by-laws and regulations of this company adopted at their meeting, began and held in the city of Washington, on the 20th June, 1828, carried into effect this provision of the charter, and appointed the city of Washington as the place for holding the general meetings.

The by-law thus originally adopted, has since been changed by the stockholders, and finally in general meeting duly assembled on the 4th day of August, 1842, they ordered and declared “that all future general meetings of the stockholders of the Chesapeake and Ohio Canal company, unless otherwise ordered in conformity with the terms of the charter, shall be held *at the office of the company in the city of Frederick.*” This order having been passed by the stockholders on the presentation to them of a memorial from the citizens of Frederick, respectfully remonstrating against the removal of the office from Frederick which was then talked of, has appeared to me to be an expression of their determination that the office shall not be removed from this place till such time as they shall authorize the removal, by a repeal or modification of the order alluded to. A majority of the board of directors however, viewing, it is presumed, the subject in a different light, on the 13th of November last, passed resolutions which may be seen by reference to the journal of proceedings of that day, directing the removal of the office of the company with all its books, papers, furniture, &c., to Cumberland “as soon as it conveniently can be done after the 1st of January next”, and ordering that the first meeting of the board, after that day, shall be held at the company’s office in Cumberland. Under these circumstances a definite expression of the views of the stockholders seems to be demanded in order that they may be conformed to.

It is necessary, also, that it be given on the present occasion, inasmuch as this is the only meeting that will probably be held by them previous to the time designated for carrying into effect the resolutions of the Board of Directors to which I have alluded. Some action is at present certainly required at your hands, for if by possibility, I have misconstrued your order of the 4th of August, 1842, in understanding it to fix the office of the company in Frederick until such time as you shall authorize its removal from this place, it unquestionably does require the general annual meet-

ing of the stockholders, to be held "at the office of the company in the city of Frederick," and it is perfectly manifest that if the office be removed from Frederick in January, the by-law will be inapplicable.

I therefore, in obedience to your call and through a sense of duty, respectfully invite your attention to the subject, in order that you may take such action thereon, as in your judgment may be most proper to remove the difficulty arising from the incompatibility between the resolutions of the board and your order of the 4th of August, 1842, and thereby prevent future embarrassment.

Respectfully submitted,

JAMES M. COALE,

President of the Ches. and Ohio Canal Company.

The communication having been read, the journal of proceedings of the Board of President and Directors of 13th of November last, was called for, and having been read and considered, on motion of Allen Bowie Davis, Esquire, the following preamble and resolutions were unanimously adopted:

Whereas, The President and Directors of the Chesapeake and Ohio Canal Company, have by their resolutions passed on the 13th day of November last, directed the removal of the office of the company from its present location to the town of Cumberland, as soon as it conveniently can be done, after the first of January next;—*And, whereas*, there does not appear to the stockholders in general meeting now assembled, any reasonable ground for such removal either as regards the greater facility in the transaction of the business of the company, or the promotion of any interest thereof;—*And, whereas*, the aforesaid order of the President and Directors is in direct contravention of an order of the stockholders passed in general meeting on the 4th day of August, 1842, pursuant to the 8th section of the charter, declaring that "the general meetings of the stockholders of the Chesapeake and Ohio Canal Company, (unless otherwise ordered in conformity with the terms of the charter,) shall be held at the office of the company in the city of Frederick; therefore,

1st. Resolved, That the resolutions adopted by the Board of President and Directors on the 13th day of November last, in regard to the removal of the office of this company from Frederick, are inconsistent, and in conflict with the order adopted by the stockholders in general meeting assembled on the 4th day of August, 1842, and are therefore void and of no effect, and shall be so held and considered.

2nd. Resolved, That the location of the office of the Chesapeake and Ohio Canal Company, shall at no time hereafter be changed except by the order or direction of the stockholders in general meeting duly assembled.

3rd. Resolved, That in the opinion of this meeting no change in the location of the office is at this time called for by the interest of the company.

4th. Resolved, That when this meeting adjourns, it shall stand adjourned to meet at the office of the company in the city of Frederick, on Thursday the 15th day of January next.

5th. Resolved, That the clerk communicate forthwith a copy of the foregoing preamble and resolutions to each member of the Board of President and Directors.

On motion, the meeting then adjourned to meet again on the 15th of January next pursuant to the fourth resolution as above recorded.

SAM'L. SPRIGG, chairman.

THOS. TURNER, Secretary.

3—Doc. J.

APPENDIX A.

REPORT:

OFFICE OF THE CHESAPEAKE AND OHIO CANAL CO.,

Frederick, April 29, 1845.

To the Stockholders of the Chesapeake and Ohio Canal Company, in General Meeting assembled:

GENTLEMEN: Pursuant to the charter of the Chesapeake and Ohio Canal Company, we have called you together on the present occasion to submit to your consideration two several enactments which have received all the sanctions required from legislative authority, and only await your assent and acceptance to become fixed laws.

The first is an act amendatory of the charter of this company, entitled "*An act further to amend the act incorporating the Chesapeake and Ohio Canal Company,*" which was passed by the Legislature of Virginia on the 20th day of January, 1844, confirmed by the Legislature of Maryland on the 8th day of February, of the same year, and assented to by the Congress of the United States, and approved by the President on the 7th day of February, 1845.

The second is a simple legislative enactment, entitled "*An act to provide for the completion of the Chesapeake and Ohio Canal to Cumberland, and for other purposes,*" passed by the Legislature of Maryland on the 10th day of March, 1845.

The reasons and motives that actuated the Board in making application for the amendment to the *charter* of the company, above referred to, will be seen by reference to their memorial to the Legislature of Virginia, a copy of which will be found in the Appendix, No. 1; and the importance of the amendment to the interests and well being of the company will be readily appreciated by an examination of the law itself.

Its leading provisions are an enlargement and extension of the time allowed for the completion of the canal to Cumberland, which, without this amendment, would long since have expired, and left the company at the mercy of the sovereignties that created it; and an *express* authority conferred on the President and Directors, or a majority of them assembled, to borrow money from time to time to carry into effect the objects authorized by the charter of the company, to issue bonds or other evidences of such loans, and to pledge the property and revenues of the company for the payment of the same and the interest to accrue thereon, in such

form and to such extent as they may deem expedient, with a proviso saving the prior rights or liens of the State of Maryland under the mortgages heretofore executed by this company to said State; except in so far as the same may be waived, deferred, or postponed; by the Legislature thereof.

The object of this proviso was to secure the assent of the Legislature of Maryland to the general provisions of the law. If the act had not contained the clause referred to, it could never have received the confirmation of the Maryland Legislature, inasmuch as such confirmation, without it or an equivalent provision, might have been construed into a general waiver of the State's claims to an indefinite amount, and for all purposes authorized by the charter of the company. Under the law as it now stands, however, whatever rights the State of Maryland may have by virtue of her mortgages remain good, except in so far as they may be waived by her legislative authority.

By obtaining this important amendment to the charter, this company was once more placed upon solid grounds, and new life was infused into its corporate existence. The time allowed for the completion of the canal to Cumberland, which, under a strict construction of the original charter, expired in September, 1840, is by it extended to the 1st day of July, 1855. All rights, privileges, or advantages, dependent upon the completion of the work to that point within the time originally prescribed, if it shall be finished within the enlarged time now allowed, are reaffirmed and legally secured, and power to the President and Directors to borrow money for the general purposes of the company, and to pledge its property and revenues for the payment of the same and the interest to accrue thereon, is plainly and expressly given.

We regard this law as of the highest importance, and respectfully recommend that it be accepted and assented to by the Stockholders, so as to make it a part of the charter of the company.

Important and necessary, however, as, under existing circumstances, are the powers and authority granted by the charter amendment of which we have just spoken, this company would still have been compelled to remain stationary; and incapable of any progressive movement towards the completion of the great work we have in charge, without the further action of the Legislature of Maryland, providing for a waiver of her liens. This, after a long, earnest, and persevering effort, we have the gratification to inform you we have likewise obtained, by the passage of the second act referred to in the commencement of this communication. Although there are some parts of this law which may be regarded as vexatious and exacting, we yet feel assured that, by the generous aid and co-operation of the friends of the canal, and by the exercise of the same prudence and perseverance which has enabled us to overcome the obstacles hitherto thrown in our path, all present difficulties may be surmounted, and the provisions and objects of the law be fully complied with and fulfilled. We therefore, in

like manner, respectfully commend it to the acceptance of the Stockholders.

It will be seen, by reference to the ninth section, that the act is not to take effect until after it is accepted by this company, and such acceptance is duly communicated to the Treasurer of the Western Shore of Maryland. Up to this time, consequently, the Board could take no definite measures for complying with its provisions; but, in anticipation of the favorable action of the Stockholders, we have, ever since the adjournment of the Legislature, been actively engaged in making arrangements to have its requirements fulfilled, and are flattered with the belief that at a very early day after the law receives your sanction its preliminary conditions will be satisfied.

When the clause requiring a guaranty for the through transportation of not less than one hundred and ninety-five thousand tons of tonnage per year for five years, dating from the end of six months next after the completion of the canal to Cumberland, was inserted in the bill, apprehensions were entertained that the requirement might prove fatal to its availability, inasmuch as individuals and private corporations are seldom known to assume upon themselves responsibilities that are to enure to the common benefit; but the enthusiasm with which the measure has been received by the stockholders of the incorporated companies of Allegany county, by the people of the Potomac counties of Maryland and Virginia, and by the citizens of the District cities, has dissipated all doubt and apprehension on this subject.

It is now sufficiently ascertained that the guarantees will be given, and securely given; *and this cause of apprehended weakness will then be converted into a source of strength.* The guaranty will not only operate as a sort of collateral security for the bonds that may be issued for the completion of the work, but, being executed for small amounts by numerous responsible parties, making, in the aggregate, the quantity stipulated for in the law, they will bind by the strong motive of self-protection nearly every important trader at each extremity and along the line of the canal to the canal interest, and induce all to take a lively and active part in augmenting its trade. In this way the Chesapeake and Ohio Canal, which is already so highly appreciated by all who are within the range of its operations, will acquire additional claims to the popular favor and support.

After the guarantees are executed and approved by the Governor of this State, and the agents representing the State in this company, or a majority of them, the Board will then be empowered to avail themselves of the operative provisions of the law, and to issue the bonds of the company for the completion of or raising the means to complete the canal to Cumberland.

According to the provisions of the law, the Board of President and Directors are invested with the discretion either to borrow money on the bonds of the company at their par value, and make contracts to have the work done, payable in cash, or, with the ap-

proval of the State agents, to enter into a contract or contracts to have it executed and paid for directly in the bonds secured in the manner therein provided for. Which plan it may be most expedient to adopt is a matter for consideration; and, unless the Stockholders formally indicate a preference, the Board will be governed by circumstances, and after consultation with the authorities above mentioned, pursue such course as in their judgements may be most conducive to the general interests of the company, keeping in view the completion of the canal at the earliest practicable period as an object of primary importance. It would certainly be more desirable for the company to raise the money themselves, and pay for the work in cash, if a loan can be readily obtained, as by that means the field of competition among contractors would be greatly enlarged; and the only consideration that at present could have any weight with the company in favor of letting out the work to be paid for in bonds, is the saving of the time that otherwise must necessarily be consumed to perfect a negotiation. But whether this consideration should be allowed to prevail, must depend materially on the character of the bids, and the responsibility of the parties who may offer to contract for bonds; in case any such proposals should be offered. No such contract certainly will be entered into, unless the parties can demonstrate to the satisfaction of the Board that they have ample means or resources, or have made such arrangements as to leave no doubt of their ability to finish the work within the time that may be prescribed, which will not exceed two years from the commencement of operations.

Whether, however, the work be completed by contractors, who can command the means and will receive the bonds in payment, or whether the Board are first to raise the money on the bonds from capitalists, and pay for the work in cash, it is very manifest that *the security given will be so abundant as to render the investment one of the best of which we have any knowledge.* By force of the law, and its acceptance by this company, the bonds will be *preferred and absolute statutory liens* on the entire nett revenues of the company, fortified by guarantees of an annual tonnage for the first five years greatly more than is necessary to yield a sum sufficient to pay the interest and the annual appropriation to the sinking fund provided by the act. The margin allowed over and above the amount necessary for the completion of the canal and payment of the necessary expenses appertaining thereto, will be applied to the payment of the interest on the actual outlay until the work is finished; and after that period the revenues of the company will be an unfailing and constantly increasing source for that purpose, and the providing an adequate sinking fund to discharge the principal of the bonds when they become due, according to the requirements of the law.

It may be proper, in this connection, to give a brief description of the Chesapeake and Ohio Canal, its dimensions, present cost, capacity, and the sources of its expected trade, in order that the strength of the security upon which the bonds are to be based may be justly appreciated.

THE CANAL.

The Chesapeake and Ohio Canal, with the terminus at present contemplated, extends from Georgetown, in the District of Columbia, to the town of Cumberland, in Allegany county, Maryland, a distance of $184\frac{1}{2}$ miles. About five miles of the canal is within the District; the entire residue of the line is within the State of Maryland. Of the entire line, $134\frac{1}{2}$ miles, extending from Georgetown to Dam No. 6, are finished and navigable, and the trade thereon is steadily increasing. Thirty-one and seven-tenths miles of the work on the remaining fifty miles have already been executed, at a cost of \$2,892,000, and there only remain eighteen and three-tenths miles of the work to be done to complete the canal, and open a through navigation from the tide water of the Potomac to Cumberland. The amount required to finish these eighteen and three-tenths miles, according to a detailed estimate made by the Chief Engineer in 1842, was \$1,545,000. That estimate was made in reference to the cost of the work which had been done at a time when provisions were high and labor scarce. Now, however, provisions are low, and labor is abundant, and these advantages must necessarily enure to the benefit of the company.

DIMENSIONS AND COST.

The *depth* of the Chesapeake and Ohio Canal is six feet throughout, but its transverse section varies. From Georgetown to Harper's Ferry, a distance of sixty miles, it is sixty feet wide at the top, and forty-two feet at the bottom. From Harper's Ferry to dam No. 5, (forty-seven miles,) the top width is fifty feet, and the bottom width thirty-two feet. From dam No. 5 to Cumberland, (seventy-seven and a half miles,) the top width is fifty-four feet, bottom width thirty feet. The basin of the canal at Cumberland is six hundred and nine feet above the level of tide water at Georgetown. This ascent is overcome by one tide and seventy-five lift locks, averaging about eight-feet lift. The locks, so far as the work has been finished, are constructed in the most durable manner, of solid masonry, and each has a chamber of one hundred feet long and fifteen feet wide in the clear. They are constructed with a view to a double lockage, whenever the exigencies of the company may require; but, as we shall presently show, the capacity of the canal, with single locks, as at present, is fully equal to the accommodation of a trade sufficient to gratify the most extravagant desires of its supporters. The sheer cost of the canal up to this time is as follows :

For the acquisition of lands	-	-	\$402,913 94
For the engineer department	-	-	358,951 04
For construction	-	-	9,013,837 56
Total	-	-	<u>\$9,775,702 54</u>

CAPACITY.

When the canal shall be finished and filled to its capacity, boats carrying 100 tons of tonnage may navigate its entire length with ease. In consequence of the mildness of the latitude in which it is located, it has heretofore seldom been closed by ice for more than six weeks in the year, which generally happens in January and February; and in this respect, it consequently possesses great advantages; over the northern canals, whose navigation is usually suspended for four or five months annually. It is scarcely necessary to go into an estimate of the annual amount of tonnage that *might* be transported on a work of this description; but, as the calculation is before us, we will here transcribe its results.

Several years ago, the Chief Engineer of this company made two estimates, founded upon data furnished by the experience of fourteen years on the Erie canal in New York. The one was based on the greatest month's work, and the other on the number of boats which in the opinion of several of the officers of that canal, could conveniently be passed each day. Assuming the capacity of boats on the Chesapeake and Ohio Canal at only eighty tons, according to the first calculation the amount of tonnage capable of being transported on it during a navigable year was shown to be, in both directions, with single locks, as at present, 3,264,000 tons, and with double locks, 5,440,000 tons; and on the second basis, the amount presented was, with single locks, 6,000,000 of tons, and with double locks, 10,000,000 of tons per annum. With a large allowance, therefore, for the usual discrepancy between theoretical calculations and practical results, it is very manifest that many years must elapse before the full capacity of the Chesapeake and Ohio Canal, with single locks, can be tested by actual experience.

SOURCES OF TRADE AND REVENUE.

The canal, running nearly parallel with the river through its entire length, necessarily passes through the centre of the fertile grain-growing valley of the Potomac, whose agricultural and manufacturing productions will, in a great measure, be borne upon it to market. Along its line may be created "a water power surpassed in extent only by that which England and the United States enjoy in common, near the western extreme of the Erie Canal, in the Falls of Niagara." When it is finished to Cumberland, it will be put in direct communication with the trade of the West, and will afford the most eligible and cheapest route to the seaboard, from the vast and populous regions beyond the Alleghany mountains. With a portage, by wagons, of only seventy-three miles on the great national macadamized road, between Cumberland and Brownsville, on the Monongahela, to which steamboats of the largest class now come, the facilities of water communication for freight of every description will be afforded to the States bordering on the Ohio river, and those of the far West who may navigate its waters, in conveying their productions to the cities of

the Atlantic, or receiving from thence their supplies. From the county of Allegany, also, a considerable amount of tonnage will be supplied, in iron, fire bricks, cement, lumber, &c., but by far the most important source of trade relied on, and to grasp which has been the primary and controlling motive in prosecuting the work to its present destination, is the boundless and inappreciable coal fields of that county. Within a range of from six to twelve miles from the basin of the canal at Cumberland the deposits of bituminous coal of a superior quality are numerous, and, morally speaking, inexhaustible. Those that have been already opened consist of horizontal strata, slightly elevated, and declining towards the valleys, so as to be situated in the best possible manner for self-drainage. According to Professor Silliman, the quantity of coal in that region that is thus situated "is so abundant that it will not be exhausted for centuries. It will be the province of a distant posterity to drain the lower beds by tunnelling, or by the unlimited and untiring energy of the steam engine." But the boundless extent of the Allegany coal fields, as well as the superior quality of the *Cumberland coal*, are matters so well established now as to render a parade of authorities on the subject in this place superfluous. Such as may desire to pursue the inquiry will find a mass of testimony collected together in the Appendix to our special report of the 16th of November, 1843, and new illustrations of its value will be seen by reference to the voluminous and very learned report of Professor Johnson "on American coals applicable to steam navigation and to other purposes," made to the Navy Department, in June, 1844, and recently published under an order of the United States Senate. In this last mentioned document, which contains the result of a long series of scientific experiments, it will be found that, "*in the order of evaporative power under equal weights*," "*of evaporative power under equal bulks*," which is deemed of the highest importance for the purposes of steam navigation, and of the "*evaporative power of combustible matter*," the *Cumberland coal* takes rank as number one in a list of thirty-seven different varieties of coal, obtained from various regions in the United States and Great Britain and her dependencies, including the Newcastle, Sidney, Pictou, Liverpool, and Scotch coals.

"As a fuel for domestic purposes, (according to the report alluded to,) it possesses, on the one hand, a flame abundantly sufficient to give cheerfulness to the aspect of a parlor fire, and, on the other, a *durability* approximating that of some of the lighter anthracites; and, as a furnace coal for the manufacture of iron, it will be found among the best of the bituminous class, since, either with or without previous coking, it may be very advantageously employed in the blast furnace."

"Three different sizes of chain were in progress of manufacture at the different periods at which these experiments were made. They can, however, be all reduced to the same size, by a comparison with a common standard sample of coal, which was used on two sizes of chain. Thus Atkinson & Templeman's (Cumber-

land coal) made eighteen links of a chain one and three-eighths inches in diameter, and eight links of another chain one and fifteen-sixteenths inches in diameter, by the use in each case of sixty pounds of coal. Midlothian (new shaft) coal of equal quantity was found adequate to the making of fourteen links of one and three-eighths inch chain; and three Virginia coals, (viz: Crouch & Snead's, Creek Company's, and Chesterfield Mining Company's,) having a mean evaporating power almost identical with the Midlothian 'new shaft,' put in nine links of one and three-eighths inch chain."

The following table will exhibit "the relative heating powers of the Cumberland and foreign coals, as tested in making chain cable, compared with their evaporative powers:"

Designation of coals.	Pounds of steam, at 212°, produced by 1 lb. coal.	Size of links, diameter, in inches	No. of links made by 60 pounds of coal.	Deducted No. of links, of 1½ inch diam., by 60 lbs.
Cumberland—Atkinson & Templeman	10.699	1 1/8	18	18
Maryland and New York Mining Co.	10.259	1 1/8	20	20
Foreign—Scotch	6.946	1 1/8	10	10
Pictou	8.412	1 1/8	11	11
Liverpool	7.842	1 1/8	13	13
Newcastle	8.656	1 1/8	15	15

Possessing these advantages, and others that might be enumerated, it is scarcely possible, without incurring a charge of extravagance, to estimate the amount of Cumberland coal that would be annually consumed, if a full and regular supply were furnished to, and at all times kept on hand in the markets of the country. We have before us, however, abundant evidence to show that the most energetic efforts will be made to keep pace with the demand, to whatever magnitude it may increase, as soon as the proper facilities of conveyance are afforded. During the past year, new life and enterprise appear to have manifested themselves in the Cumberland region. Within the range of which we have before spoken, numerous mines have already been opened by incorporated companies of large capital, private partnership, and individuals, all of whom are now preparing for vigorous operations. One railroad, which is to connect the mines with the basin of the canal at Cumberland, has already been completed; another is under contract, and two more in contemplation, which will be finished next year. These roads, the longest of which will not exceed ten miles, will bring the products of the various mines to the basin of

the canal at Cumberland, and from thence they will be transported on its smooth surface to market. According to the present tariff, the toll on the transportation of coal from Cumberland to Georgetown is one dollar per ton. It will be perceived that in the foregoing enumeration we have mainly confined ourselves to a consideration of the descending trade of the canal. The ascending will of course consist of those ordinary supplies which pass from the seaboard to the interior.

Before concluding this branch of the subject, it may be well to remark, that our income, in the present unfinished condition of the work, is more than sufficient to defray the annual expenses of the company. During the last year, the entire aggregate expenses amounted to the sum of \$47,287 66, and the income to \$55,894 16—leaving a surplus revenue of \$8,606 50. It will thus appear that the whole revenue that may accrue to the company from the important trade depending upon the completion of the canal to Cumberland, of which we have just spoken, together with a surplus income from the intermediate trade, which must continue to augment, will be covered by the liens, and be applicable, as far as is necessary, to the payment of both the interest and principal of the bonds that may be issued.

We have thus presented a brief outline of the canal, and indicated some of the most prominent sources of its expected trade and revenue. Having done this, we think we have given good reasons for the assertion made in an early part of this communication, that the bonds that are to be issued under the recent law, being preferred and absolute liens upon the entire nett revenues of the company, will be one of the best and safest investments of the day.

In addition to the laws of which we have hereinbefore spoken, and which are now submitted for your acceptance, we also obtained from the last Legislature of Maryland a very important act for the prevention of injuries to the canal and its works, to guard against frauds upon our revenues, and to facilitate generally the enforcement of the police regulations of the company. This law, not now requiring the assent of the stockholders, is not presented to you in form; but we deem it worthy of being mentioned at this time as a matter of interest. In connexion with the two other laws, it perfects our system of measures. It clothes the company with ample powers to protect and defend, whilst the others enable it to press onward to its present destination, and complete the magnificent improvement which has so long been retarded for want of such aid.

Our present position, therefore, is a subject of congratulation. With an ample provision for the completion of the Chesapeake and Ohio Canal to Cumberland; with responsible parties willing and ready to execute and deliver the guaranty required by the third section of the act, to give efficacy to that provision, and with a confident reliance upon the cordial co-operation of those whose sanction and approval are necessary to perfect such guaranty, and

some of the other proceedings under the law, we have every reason to felicitate ourselves on the prospect of a speedy termination of the long probation which this company has been compelled to endure. And among the numerous causes of gratification which will arise from a contemplation of the future, in case our just expectations in this behalf be realized, not the least will be the conviction that, at an early period after the navigation shall have been opened to Cumberland, the State of Maryland will derive substantial returns from her large investments in this work. The shadow that has recently been thrown across her honored name is from the pillar of debt that has been built up by her contributions to this company, and the burden of that debt must continue to bear heavily upon her patriotic people, until relief is brought to them from the revenues of the canal.

It will be observed that in the present communication we have confined ourselves exclusively to the special objects for which this meeting was called, and to the consideration of matters appertaining thereto. At the regular annual meeting of the stockholders in June next, we will make our usual report in regard to the general concerns of the company during the past year.

By order of the Board:

JAMES M. COALE,

President of the Ches. and Ohio Canal Company.

APPENDIX.

NO. 1.

[Copy of the memorial to the Legislature of Virginia.]

To the honorable the General Assembly of Virginia:

The memorial of the President and Directors of the Chesapeake and Ohio Canal Company respectfully states, that, by the twentieth section of the act incorporating said company, passed by the Legislature of Virginia on the 27th day of January, 1824, confirmed in all its provisions by the Legislature of Maryland on the 31st of January, 1825, and assented to by Congress on the 3d of March, 1825, "so far as its provisions were necessary to carry it into effect in the District of Columbia, but no further," it is provided that the said company shall complete the eastern section of said canal, which, by an amendment to the charter passed in 1827, is authorized to be terminated at or near the town of Cumberland, in the term of twelve years from the commencement of said work.

And your memorialists state, that, under and by virtue of the said several acts of incorporation, the Chesapeake and Ohio Canal Company was duly organized, by the election of President and Directors, on the 20th day of June, 1828; and on the fifty-second anniversary of American Independence, the President of the United States dug the first spade full of earth from the channel of said canal. It was not, however, until the ensuing September, in the year 1828, that the Chesapeake and Ohio Canal was in effect begun; and from that time the work was vigorously entered upon, and prosecuted from Georgetown upwards.

And your memorialists state, that a dispute and controversy having arisen, between the Baltimore and Ohio Railroad Company and the Chesapeake and Ohio Canal Company, as to the prior right of route, particularly at the narrow pass called the Point of Rocks, about fifty miles above Georgetown, and on the banks of the Potomac river, the said Baltimore and Ohio Railroad Company, on the 23d, 24th, and 25th of June, in the year 1828, filed three several bills of complaint in the high court of chancery, against the said Chesapeake and Ohio Canal Company, and on the last mentioned day obtained an injunction against the said company, forbidding it from proceeding further in the prosecution of its works.

And your memorialists state, that the said injunction was confirmed by the chancellor, and remained in force, and prevented this company from prosecuting its work above the point in question, until the same was dissolved by the court of appeals of Maryland, on the 5th of January, 1832, by which the company was on that portion of the line of the canal delayed and retarded nearly four years.

And your memorialists state, that, if allowance be made for the time during which the company's work was suspended by the

high mandates of the law as aforesaid, the term allowed for the completion of the eastern section of the canal would expire in the month of April, 1844.

And your memorialists state, that, as soon as said injunction was dissolved, the said company resumed operations, and diligently and vigorously proceeded in its work. And your memorialists state, that the canal is now finished to Dam No. 6, which is one hundred and thirty-four and a half miles from Georgetown, and within fifty miles of the town of Cumberland. Of these fifty miles, there are thirty-one and seven-tenths miles of canal finished, at a cost of \$2,680,000; but they were constructed in unconnected sections, and are consequently valueless, and incapable of being used, until the whole are finished. Only eighteen and three-tenths miles remain to be done, which are estimated by the Chief Engineer to cost \$1,545,000, and which, when completed, *will finish the entire eastern section of the canal to Cumberland.* The finished portion above mentioned was all done prior to the summer of 1841; and the means of the company being at this time exhausted, it was compelled to stop any further progress. The liberal aid which had previously been extended to the company by the State of Maryland, and on which great loss was sustained by the company, by reason of the depreciation of the State bonds, was then all expended. That State was unable, from its heavy pecuniary liabilities, and the unprecedented pressure of the times, to render any more assistance, and the company was destitute of means to prosecute any further its great undertaking. In this condition of things, time passed on, and the period allowed for completing the eastern section of the canal has nearly expired.

In the improved condition of affairs, and the apparent abundance of money seeking investments, your memorialists are now assured that if the company be allowed to raise the means by an express grant of authority, and the term for completing the work be extended, the canal can be finished within a short time, and without further interruption.

It is expected that Maryland will waive her existing liens for that purpose, and she is able to do no more, under her present large debt; and *all we ask of Virginia* is, that she will consent to give the company further time to complete the canal, and an express authority to borrow money, on its own credit and the pledge of its property to carry into effect the objects authorized and contemplated by the act of its incorporation.

Under the present charter, your memorialists conceive that the company possesses the authority to borrow money as incidental to the powers granted, and as being necessary to carry into effect the objects of the act of incorporation; but, in the existing condition of things, and the great caution with which capitalists invest their funds, your memorialists have reason to believe that an express authority to that effect will greatly aid and facilitate their efforts in this behalf, and enable them, upon fair and advantageous terms, to obtain the requisite means to complete the work to Cumberland.

The authority however, should be granted so as not to be susceptible of being construed into an interference with existing liens on the property of the company, as otherwise it would not receive the sanction of the State of Maryland, and because also honesty and good faith demand that existing engagements should be held inviolable. We feel confident, however, that if this be done, Maryland will waive and postpone her claims upon the company by a separate law, as that is the only mode now remaining by which the work can be finished, and until it is finished none can reap any benefit from its avails.

Your memorialists do not deem it necessary to go into a recital of the long and numerous embarrassments which this company has labored under, as they are doubtless well known to the public; nor to speak of the great benefits which are to result from the completion of the work which it has in hand. In the success of the great enterprise, Virginia is deeply interested. She was the first to patronize and bring the company into existence. Her citizens residing in the counties bordering on the Potomac are already reaping some of the benefits of the canal, in having by it the advantage of a cheap communication with the markets on tide water. When the work is finished, these advantages will be greatly increased, and the benefits be more widely extended. We therefore respectfully hope that the consideration of benefit to the State, as well as of justice to the stockholders of the company, &c., will induce your honorable body to comply promptly with the reasonable prayer of this petition. We only ask you to extend the time allowed for completing the eastern section of the canal to Cumberland, and to give an *express* authority to the company to borrow money on its own credit, for the objects authorized by the charter. Of the State of Virginia we at present ask no more, unless, indeed, that your honorable body will act speedily on the subject, and pass the necessary law as early as practicable. It will have to receive the assent of the Maryland Legislature, and, after such assent is given, Maryland will still have to pass another law to waive her liens, which will consume some time. For these reasons, as well as that the company may take early measures to resume the work on the canal, your memorialists pray that the earliest practicable action be afforded to their application. It is plain and just. It asks nothing of Virginia but an allowance of further time, and the giving *expression* to an authority already possessed; and there can therefore, we hope, be but little cause for delay in complying with it.

And your memorialists will ever pray, &c.

JAMES M. COALE, *President.*

FRISBY TILGHMAN,

WILLIAM PRICE,

JOHN P. INGLE,

DANIEL BURKHART,

JOHN O. WHARTON,

} *Directors.*

An act further to amend the act incorporating the Chesapeake and Ohio Canal Company, passed January twentieth, eighteen hundred and forty-four.

Be it enacted by the General Assembly, That the time limited and prescribed by the act entitled "An act incorporating the Chesapeake and Ohio Canal Company," and the amendments thereto for completing the first or eastern section of the Chesapeake and Ohio canal, be, and the same is hereby, enlarged and extended to the first day of July, eighteen hundred and fifty-five, and that no rights, privileges, or advantages, granted by law, shall be forfeited or lost, in case the said eastern section shall be finished within the time herein allowed, any thing in any act to the contrary notwithstanding.

Be it further enacted, That the Chesapeake and Ohio Canal Company, whenever it may deem it expedient, without reference to the western section of the canal, and whether it shall be commenced or not, shall have power and authority to extend the branch from the main canal, by slack-water navigation, with dams and locks or otherwise, to the coal banks at or above the mouth of the Savage river; and, in regard thereto, shall have and enjoy all the rights and advantages provided by the act passed by the Legislature of Maryland at its December session, 1826, entitled "An act to amend the act incorporating the Chesapeake and Ohio Canal Company," and assented to by the Legislature of Virginia on the 27th day of February, 1827.

Be it further enacted, That the President and Directors of the Chesapeake and Ohio Canal Company; or a majority of them assembled, shall have full power and authority to borrow money (provided the State of Virginia shall not be bound beyond her interest in the stock of the company) from time to time, to carry into effect the objects authorized by the charter of said company; to issue bonds or other evidences of such loans, and to pledge the property and revenues of said company for the payment of the same, and the interest to accrue thereon, in such form and to such extent as they may deem expedient; *Provided,* That nothing herein contained shall be construed to impair the prior rights or liens of the State of Maryland under the mortgages heretofore made and executed by the Chesapeake and Ohio Canal Company to said State, but the same shall be held binding, and be accordingly respected, except in so far as the same may hereafter be waived, deferred, or postponed, by the Legislature of said State.

And be it further enacted, That this act shall take effect and be in force as soon as it shall have received the assent of the Legislature of the State of Maryland, of the Congress of the United States, and the Stockholders of the said Chesapeake and Ohio Canal Company in general meeting assembled.

State of Virginia, city of Richmond, to wit:

I, George W. Munford, Clerk of the House of Delegates, and Keeper of the Rolls of the Commonwealth of Virginia, do hereby certify and make known, that the foregoing is a true copy of an act passed by the General Assembly of Virginia on the twentieth of January, eighteen hundred and forty-four.

Given under my hand, this twentieth of January, eighteen hundred and forty-four.

GEORGE W. MUNFORD, *Clerk*

House of Delegates, and Keeper of the Rolls of Va.

NO. 3.

To the honorable the General Assembly of Maryland:

We have the honor herewith to communicate, for the assent and confirmation of the Legislature of Maryland, a certified copy of a law passed by the Legislature of Virginia, "further to amend the act incorporating the Chesapeake and Ohio Canal Company, passed January 20, 1844," together with a copy, substantially, of the memorial of the President and Directors of the Chesapeake and Ohio Canal Company, which was presented to the Legislature of Virginia on the 26th ultimo, and upon the prayer of which said law was enacted. In our annual communication addressed to the Executive of Maryland on the 15th of December last, we went into some detail in regard to the necessity of an amendment to the charter of the company in the manner provided for by this law; and the facts therein contained in this behalf are also substantially set forth in the accompanying copy of the memorial to the Virginia Legislature, to which we respectfully refer you. The section of the act in reference to the *grant of a power* to construct a slack-water navigation to the mouth of Savage was inserted in the draught of the law after the memorial was prepared and signed, and was put in in consequence of doubts being entertained whether, under the amendment of the charter of the company, passed by the Legislature of Maryland at its December session, 1826, and assented to by Congress in the year 1827, a branch from the main canal to the coal banks at or above the mouth of Savage river could be made unless the western section of the canal were undertaken and prosecuted. To remove these doubts, and to enable the company to construct such branch whenever the State of Maryland shall see fit to cause the same to be done, we deemed it expedient to obtain from Virginia a clear and unequivocal right to do so, independent of any movement in regard to the western section.

The very great importance of *all the provisions* of the law in question is manifest, and will, we hope, be readily appreciated by all conversant with the affairs of the company and the magni-

tude of the State's interest in the work. We therefore shall forbear any further explanation of them, as we consider it altogether unnecessary.

We respectfully ask of the General Assembly of Maryland, that they will pass an act confirming and assenting to the accompanying law of the Legislature of Virginia, amending the charter of the Chesapeake and Ohio Canal Company.

We shall likewise take early measures for obtaining the assent of Congress thereto, which we feel perfectly sure will be promptly accorded to us.

By order of the Board:

J. M. COALE,
President of the Chesapeake and Ohio Canal Co.

An Act to confirm an act of the General Assembly of the State of Virginia, entitled "An act further to amend the act incorporating the Chesapeake and Ohio Canal Company," passed January twentieth, eighteen hundred and forty-four.

Whereas the General Assembly of Virginia have heretofore, at the December session of the said General Assembly which was begun in the year eighteen hundred and forty-three, passed an act entitled "An act further to amend the act incorporating the Chesapeake and Ohio Canal Company," in the words and substance following, to wit:

[See the said act of the General Assembly of Virginia, in this Appendix, marked No. 2, which is set out at length in this law.]

SECTION 1. *Therefore, be it enacted by the General Assembly of Maryland,* That the said act of the General Assembly of Virginia be, and the same is hereby, accepted, assented to, and confirmed.

SECTION 2. *And be it enacted,* That this act shall take effect and be in force from the passage thereof.

State of Maryland, to wit:

Be it remembered, and we hereby certify, that the foregoing is a true copy of the act entitled "An act to confirm an act of the General Assembly of the State of Virginia, entitled "An act further to amend the act incorporating the Chesapeake and Ohio Canal Company, passed January twentieth, eighteen hundred forty-four," which passed the General Assembly of Maryland at December session, one thousand eight hundred and forty-three.

Given under our hands, at the city of Annapolis, this 8th day of February, 1844.

JOSEPH H. NICHOLSON,
Clerk Senate, Maryland.

GEORGE G. BREWER,
Clerk House of Delegates, Maryland.

MEMORANDUM.—The above act was passed by the Legislature of Maryland on the 8th day of February, 1844.

NO. 4.

[Copy of the memorial presented to Congress.]

To the Senate and House of Representatives of the United States of America in Congress assembled:

We have the honor herewith to communicate, for the assent and confirmation of your honorable bodies, a certified copy of a law passed by the Legislature of Virginia, entitled "An act further to amend the act incorporating the Chesapeake and Ohio Canal Company," passed January 20, 1844, together with a copy substantially of the memorial of the President and Directors of said company, which was presented to the Legislature of Virginia on the 26th of December last, and upon the prayer of which said law was enacted. The section of the act in reference to the grant of power to construct a slack-water navigation to the mouth of Savage was inserted in the draught of the law after the memorial to the Legislature of Virginia was prepared and signed, in consequence of doubts being entertained whether, under the amendment of the charter of the company, passed by the Legislature of Maryland at its December session, 1826, and assented to by Congress and Virginia in the year 1827, a branch from the main canal to the coal banks at or above the mouth of Savage river could be made unless the western section of the canal was undertaken and prosecuted. To remove these doubts, and to enable the company to construct such branch whenever it should deem it expedient to cause the same to be done, we thought it advisable to obtain a clear and unequivocal right to do so, independent of any movement in regard to the western section.

We therefore respectfully ask of the Congress of the United States, that they will pass an act confirming and assenting to the accompanying law of the Legislature of Virginia, amending the charter of the Chesapeake and Ohio Canal Company.

By order and in behalf of the Board:

J. M. COALE,

President of the Chesapeake and Ohio Canal Co.

An act confirming and assenting to an act of the Legislature of Virginia, entitled "An act further to amend the act incorporating the Chesapeake and Ohio Canal Company."

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the act of the Legislature of Virginia, entitled "An act further to amend the act incorporating the Chesapeake and Ohio Canal Company," which was passed on the twentieth day of January, in the year one thousand eight hundred and forty-four, be, and the same is hereby, ratified, confirmed, and assented to: *Provided,* That this assent and confirmation shall not be so construed as to

bind the United States beyond their interest in the stock in said company, nor as either affirming or denying the validity of the rights or liens of the State of Maryland referred to in the third section of the said act of Virginia: *Provided, also*, That nothing herein contained shall be held or construed to impair the rights of any individual or corporation derived from the original act of incorporation of the said Chesapeake and Ohio Canal Company:

Approved 7th February, 1845.

UNITED STATES OF AMERICA.

DEPARTMENT OF STATE.

To all to whom these presents shall come, greeting:

I certify that the annexed copy of an act of Congress, approved 7th February, 1845, has been compared with the original on file in this office, and found to be correct.

In testimony whereof, I, James Buchanan, Secretary of State of the United States, have hereunto subscribed my name, and caused the seal of the Department of State to be [SEAL.] affixed. Done at the city of Washington, this 5th day of May, A. D. 1845, and of the Independence of the United States of America the sixty-ninth.

JAMES BUCHANAN.

NO. 5.

An act to provide for the completion of the Chesapeake and Ohio Canal to Cumberland, and for other purposes.

Be it enacted by the General Assembly of Maryland, That the President and Directors of the Chesapeake and Ohio Canal Company be, and they are hereby, authorised and empowered to borrow, or raise, upon the bonds of said company, with preferred liens on its revenues, as hereinafter mentioned, to secure the payment of the same and the interest to accrue thereon, such sum or sums of money as may be required to pay for the completion of the Chesapeake and Ohio Canal to Cumberland, under a contract or contracts hereafter to be entered into by the president and directors of said company, and the necessary expenses appertaining thereto, and to pay the interest on the bonds that may be issued for said purposes in aid of the nett revenues of said company, until they become sufficient to pay the same, after the debts now due for repairs on the canal and for officers' salaries are satisfied and paid: *Provided, however*, That the whole amount of bonds authorised to be issued as aforesaid shall not exceed the sum of one million seven hundred thousand dollars, if the same be issued in six per cent. currency bonds, or the equivalent thereof, according

to the ratio prescribed for arriving at such equivalent in the act passed by the General Assembly of Maryland, at its December session, eighteen hundred and thirty-eight, chapter three hundred and eighty-six, if the same be issued in five per cent. sterling bonds: *And provided, further,* That nothing herein contained shall be construed to prevent the said company from contracting to pay for the whole, or any portion of said work, in the bonds of the company secured as aforesaid, or from paying for the same, in whole or in part, in said bonds, instead of borrowing or raising the money thereon for that purpose, if the party or parties contracting for or doing said work shall agree to receive the same, and the president and directors of said company shall deem it expedient to do so: *Provided, however,* That the said company shall not make any contracts by which the completion of the whole work to Cumberland shall not be properly and fully secured, to be approved of by the State's agents.

SEC. 2. *And be it enacted,* That the bonds that may be issued by the Chesapeake and Ohio Canal Company, under the foregoing section, shall be signed by the president of said company, sealed with its corporate seal, attested by the clerk, and be approved and countersigned by the agents representing this State in joint-stock companies in which the State has an interest, or a majority of them; and the said bonds shall be issued in sums of not less than one hundred dollars, or one hundred pounds sterling, as the case may be, and be made payable in not less than thirty-five years, and bear an interest not exceeding six per cent. per annum, payable semi-annually on the first day of January and the first day of July in each year; both principal and interest to be payable at such place or places as the president and directors of said company may designate; and the bonds so issued as aforesaid shall appear on the face of the same to be preferred liens on the revenues of said company, according to the provisions of this act, and with the assent of the said company, as is hereinafter provided for, the said bonds without any preference or priority over each other on account of date, shall be preferred liens on the revenues and tolls that may accrue to the said company from the entire and every part of the canal and its works between Georgetown and Cumberland, which are hereby pledged and appropriated to the payment of the same, and the interest to accrue thereon, in the manner hereinafter mentioned: *Provided, however,* That this State shall in no case be bound or held responsible for the payment of the said bonds, or of the interest thereon: *And provided, further,* That the president and directors of said company shall from time to time, and at all times hereafter, have the privilege and authority to use and apply such portion of said revenues and tolls as in their opinion may be necessary, to put and keep the said canal in good condition and repair for transportation, provide the requisite supply of water, and pay the salaries of officers and agents and the current expenses of the said company.

SEC. 3. *And be it enacted,* That the bonds authorized to be

issued under the first section of this act shall not be sold, hypothecated, or paid out to contractors, at a less rate than the par value thereof, estimating the par of a five per cent. sterling bond at one-sixteenth less than the par of a six per cent. currency bond of the same denomination; and no bonds shall be issued for the completion of the Chesapeake and Ohio Canal to Cumberland, as hereinbefore provided for, until after one or more of the incorporated companies of Allegany county, or other corporations or individuals, shall, by an instrument or instruments of writing in due form, with ample security, to be approved by the agents representing this State in the Chesapeake and Ohio Canal Company, or a majority of them, and the Governor, guaranty to the said company an aggregate transportation on the entire length between Cumberland and the District of Columbia, on said canal, of not less than one hundred and ninety-five thousand tons of tonnage per year, on an average of years for five years, dating from the end of six months after the said canal shall have been completed to Cumberland, and the navigation opened to that point.

SEC. 4. *And be it enacted*, That the rights and liens of this State upon the revenues of the Chesapeake and Ohio Canal Company shall be held and considered as waived, deferred, and postponed, in favor of the bonds that may be issued under the foregoing sections, so as to make the said bonds and the interest to accrue thereon preferred and absolute liens on said revenues, according to the provisions of the second section of this act, until said bonds and interest shall be fully paid.

SEC. 5. *And be it enacted*, That semi-annually in each year as the same shall be payable, the said Chesapeake and Ohio Canal Company shall pay the interest on the bonds constituting preferred liens, as aforesaid, to the party or parties respectfully entitled thereto, or to their agent or agents authorized to receive the same; and as soon as the nett revenues of said company arising from the canal and its works (between Georgetown and Cumberland, as aforesaid) shall be more than sufficient to pay the interest that may become due and in arrear upon said bonds, with the costs of remittance and exchange, (if there be any,) and such further sum, not exceeding five thousand dollars annually, as may be necessary to pay the interest on the bonds or certificates of debt heretofore issued by said company to the creditors of the Potomac Company, for claims adjusted under the twelfth section of the charter of the Chesapeake and Ohio Company, the said company shall annually pay to the Treasurer of the Western Shore of this State, who shall receive the same under the responsibilities of his office, the surplus nett revenues as aforesaid, to such amount as may be necessary, as an adequate sinking fund, not exceeding the sum of twenty-five thousand dollars a year, on an average of years, dating from the first day of January next after the completion of the canal to Cumberland; which sum or sums shall, from time to time, be invested by said Treasurer, and be accumulated by him as a sinking fund, to pay the principal of said bonds, until a sufficient amount is so

paid and accumulated for that purpose ; and the moneys that may be paid by the said company to the said Treasurer, and accumulated by him as aforesaid, shall be considered as being held by the State of Maryland, as agent for the Chesapeake and Ohio Canal Company, for the payment of said bonds, and the same shall be applied by the said Treasurer to the payment of the same, when they become due, without any further order or direction on the part of this State or the said company, and the said moneys shall on no account be applied or used for any other purposes whatsoever: *Provided, however,* That if they deem it expedient to do so, the president and directors of said company may, in case they borrow or raise money on said bonds, discount or pay in advance one half year's interest on the same, and the interest for such further time as may be necessary to make the semi-annual payments of interest fall due on the days hereinbefore specified for the payment of the same.

SEC. 6. *And be it enacted,* That the president and directors of the Chesapeake and Ohio Canal Company be, and they are hereby, authorized to execute any deed, or mortgage, or other instrument of writing, that may hereafter be deemed necessary or expedient to give the fullest effect to the foregoing provisions.

SEC. 7. *And be it enacted,* That the Chesapeake and Ohio Canal Company shall execute to this State, and deliver to the Treasurer of the Western Shore of Maryland, a further mortgage on the said canal, its lands, tolls, and revenues, subject to the liens and pledges by the foregoing provisions of this act made, created, or authorized, as an additional security for the payment of the loan made by this State to the said company, under the act of December session, eighteen hundred and thirty-four, chapter two hundred and forty-one, and the interest due and in arrear, and which hereafter may accrue thereon; which mortgage shall be submitted to the attorney general of this State, and be approved by him as sufficient in law.

SEC. 8. *And be it enacted,* That it shall be the duty of the president and directors of the Chesapeake and Ohio Canal Company to transmit to the Governor of this State a copy of the annual report of the said company on or before the first day of December in each year, hereafter, so long as this State continues to be a stockholder in said company.

SEC. 9. *And be it enacted,* That whenever the Chesapeake and Ohio Canal Company, in general meeting of the stockholders assembled, shall approve, assent and agree to the provisions of this act, and shall have communicated to the Treasurer of the Western Shore of Maryland such approval, assent, and agreement, under the corporate seal and the signature of the president of said company, this act, and every part and provision thereof, shall take effect and be in full force, but not otherwise.

SEC. 10. *And be it enacted,* That nothing herein contained shall prevent the State from redeeming the bonds and the interest thereon authorized to be issued by this act, if any time hereafter

the Legislature may deem it expedient or best for the interest of this State to do so.

BY THE HOUSE OF DELEGATES.

MARCH 10, 1845.

This engrossed bill, the original of which passed the House of Delegates March 7, 1845, was this day read and assented to.

By order:

G. G. BREWER, *Clerk.*

BY THE SENATE.

MARCH 10, 1845.

This engrossed bill, the original of which passed the Senate March 10, 1845, was this day read and assented to.

By order:

JOS. H. NICHOLSON, *Clerk.*

[Great Seal.]

THOMAS G. PRATT.

STATE OF MARYLAND, *to wit:*

Be it remembered, and we hereby certify, that the foregoing is a true copy of the act (chapter 282) entitled "An act to provide for the completion of the Chesapeake and Ohio canal to Cumberland, and for other purposes," which passed the General Assembly of Maryland at December session, one thousand eight hundred and forty-four.

Given under our hands, at the city of Annapolis, this fifteenth day of March, in the year one thousand eight hundred and forty-five.

GEORGE G. BREWER,

Clerk House of Delegates, Maryland.

JOS. H. NICHOLSON,

Clerk Senate, Maryland.

Instrument of writing transmitted to the Treasurer of the Western Shore of Maryland, signifying the acceptance on the part of the Chesapeake and Ohio Canal Company of the act of Maryland, December session, 1844, entitled "An act to provide for the completion of the Chesapeake and Ohio Canal to Cumberland, and for other purposes."

Whereas the General Assembly of Maryland did, at its late December session, 1844, pass an act entitled "An act to provide for the completion of the Chesapeake and Ohio Canal to Cumberland, and for other purposes," in which act, among other things, it is provided, "that whenever the Chesapeake and Ohio Canal Company, in general meeting of the Stockholders assembled, shall approve, assent, and agree to the provisions of this act, and shall have communicated to the Treasurer of the Western Shore of Maryland such approval, assent, and agreement, under the corporate seal and

the signature of the President of said company, this act, and every part and provision thereof, shall take effect, and be in full force, but not otherwise."

And whereas the Stockholders of the Chesapeake and Ohio Canal Company did, in general meeting, on the 29th day of April, 1845, pass the following resolution:

"*Resolved*, by the Stockholders of the Chesapeake and Ohio Canal Company, in general meeting duly assembled, That the provisions of the act entitled 'An act to provide for the completion of the Chesapeake and Ohio Canal to Cumberland, and for other purposes,' passed by the Legislature of Maryland at its December session, one thousand eight hundred and forty-four, chapter 282, be, and the same are hereby, approved, assented, and agreed to; and that such approval, assent, and agreement, under the corporate seal and the signature of the President of this company, be communicated to the Treasurer of the Western Shore of said State, in conformity with the ninth section of said act:"

Now, therefore, I, James M. Coale, President of the Chesapeake and Ohio Canal Company, do, by these presents, make known to the Treasurer of the Western Shore of Maryland, that the Stockholders of the Chesapeake and Ohio Canal Company have, in general meeting, assented to and accepted the said act of the General Assembly of Maryland, passed at December session, 1844, entitled "An act to provide for the completion of the Chesapeake and Ohio Canal to Cumberland, and for other purposes," with all its conditions and provisions.

In testimony whereof, I have hereunto caused the corporate seal of the said Chesapeake and Ohio Canal Company to be [L. s.] affixed, and signed these presents, this thirtieth day of April, Anno Domini one thousand eight hundred and forty-five.

J. M. COALE,

President Chesapeake and Ohio Canal Company.

Test: THOMAS TURNER,

Clerk Chesapeake and Ohio Canal Company.

OFFICE CHESAPEAKE & OHIO CANAL CO.,

Frederick, May 5, 1845.

I hereby certify the foregoing to be a true copy of the original instrument of writing which was transmitted to the Treasurer of the Western Shore of Maryland on the 3d instant.

Test:

THOMAS TURNER,

Clerk Chesapeake and Ohio Canal Company.

APPENDIX B.

REPORT:

To the Stockholders of the Chesapeake and Ohio Canal Company, in General Meeting assembled:

OFFICE OF THE CHESAPEAKE AND OHIO CANAL CO.,

Frederick, June 2, 1845.

GENTLEMEN: In a communication to the Governor of Maryland, made on the 15th of January last, we presented a full account of the operations of the company during the entire calendar year of 1844, and exhibited statements of the financial condition of the company at the close of the year. That communication was printed by an order of the House of Delegates; and, as it embraces every transaction of interest connected with the affairs of the company during the period it covers, we respectfully submit a revised copy of it herewith, as a part of this our seventeenth annual report. See Appendix, No. 8. In the Appendix, Nos. 1; 2, 3, and 4; will be found a schedule of the officers and agents in the service of the company, with the compensation allowed to each, respectively, together with the usual financial statements of the Clerk and Treasurer, to the 31st ultimo, the close of the fiscal year. Since the first of January, the operations on the canal have continued to improve; no breaches of any moment have occurred; and during the winter the navigation was only suspended at brief intervals by ice, on the lower division, embracing in all not more than 24 days. The improvements, including the tumbling waste near Georgetown, of which we have spoken in the communication to the Governor above referred to, have all been completed, and the entire line of the finished portion of the canal is now in excellent condition. The receipts from tolls for the first five months of this year, compared with the corresponding months of 1844, have been as follows:

	In 1844.	In 1845.
January - - - -	\$682 02	\$1,263 55
February - - - -	16 95	1,000 87
March - - - -	6,362 08	6,408 42
April - - - -	5,792 20	6,816 84
May - - - -	6,258 25	7,076 97
	<hr/>	<hr/>
	19,111 50	22,566 65

Showing an increase in favor of the past five months of the present year to the amount of \$3,455 15. During the entire fiscal year the company has contracted no debt which has not been promptly discharged on demand; and cash payments for current expenses on the several divisions have been steadily maintained. The outstanding debt for repairs and officers' salaries entailed on this company by the policy which was pursued prior to 1843, of which we have spoken in former reports, and which at the close of that year amounted to \$90,969 50, has since been reduced by gradual payments to \$49,028 21. The system now established, by which in a great measure the Board have been enabled to realize these results, has not only produced punctuality in the fulfilment of engagements and harmony and method in the administration of our affairs, but it has likewise necessarily advanced the general interests of the company, by reinstating its credit, and securing the greatest possible economy in its operations and management.

The superintendent of the first division of the canal having resigned his office, to take effect on the 1st instant, the Board have reduced the number of superintendents to two, and have extended the duties of the superintendent of the second division, so as to embrace both the first and second divisions; giving to him, as additional compensation for such enlarged services, one-half of the amount heretofore paid to a third superintendent. By this arrangement the expenses of the company will be somewhat reduced; and it is also believed that more efficient attention to the canal and its works will be thereby secured. Some few other changes have been made in the officers of the company, in consequence of resignations and removals for cause, but they are not of sufficient moment to require a specific notice. In all cases, the Board exact a vigilant attention to duty as the condition of a continuance in office; and in making appointments to fill vacancies, we endeavor to select the most suitable and worthy.

During the last session of the Legislature of Maryland, a joint resolution was passed by both Houses, authorising the commissioner of loans to receive and receipt for the £21,475 sterling coupons heretofore tendered to the State in part payment of the first six months interest on the subscription of the State to the capital stock of this company under the acts of 1838, chapters 386 and 396. In conformity with said resolution, the coupons to the amount mentioned have been delivered to the commissioner of loans, and his receipt taken therefor.

The attention of the Board has recently been directed to the subject of the land titles of the company; and, finding no full record of them in the office, an additional clerk has been temporarily employed to make out a perfect abstract, arranging them in regular sequence, according to the sections of the line they respectively cover. It is to be regretted that this was not done from time to time, as the lands were acquired, inasmuch as it could thus have been accomplished with more facility, and with much less labor.

In the year 1834, the work now contemplated was commenced, but after some progress had been made therein, it was abandoned. We shall now cause it to be thoroughly completed.

By a letter dated the 7th ultimo, the President of the Baltimore and Ohio Railroad Company informed the President of this company, that, "until otherwise ordered, the rate for the transportation of coal from Cumberland to Dam No. 6 *will be four cents per ton per mile*, and for iron *six cents per ton per mile*." A copy of the letter containing the reasons given for this proceeding is in the Appendix, marked No. 5. For the reply of the President of this company, and the resolutions of the Board in relation to the subject, see Appendix Nos. 6 and 7.

In view of the numerous publications which have emanated from the Baltimore and Ohio Railroad Company, in regard to the cost of transporting coal on their road, and of their repeated assertions, that they could engage in the business "without danger of serious competition from any other rival," it must certainly be admitted that their present movement is difficult of satisfactory explanation. If two cents per ton per mile for the transportation of coal between Cumberland and Dam No. 6 be not an adequate remuneration to that company, or if with that charge they cannot sufficiently prevent the coal trade from passing down to the canal, and thereby secure it to themselves, under all disadvantages of existing circumstances, the idea that their road can be a "rival," after the canal shall be finished to Cumberland, cannot be entertained by any intelligent mind. They have not, as we are advised, altered their charges for carrying coal from Cumberland to Baltimore city, or to other points on their road, and they remain at the same rates as heretofore.

Those coal dealers only who might desire to have their cargoes unloaded at Dam No. 6 are to be charged *four cents per ton per mile*, which is the *maximum* amount allowed by their charter, although, indeed, the rail road company have heretofore asserted their ability to carry coal at a less actual cost to that point than on the entire or other parts of their road. A stranger, unacquainted with surrounding circumstances, would be totally at a loss to assign a motive for this singular proceeding; but its object is easily understood, when it is known that the present *finished* portion of the Chesapeake and Ohio Canal terminates at Dam No. 6, and that the two works coming in contact at that point the coal brought down by the road can be there transferred to the canal. But we regard this measure not only as excessively exacting, and altogether indefensible in itself but as being in plain violation of the formal arrangement entered into between the two companies in the fall of 1843. By that arrangement, the rail road company expressly agreed "to *fix* their charge for the transportation of coal from Cumberland to Dam No. 6 at two cents per ton per mile, *and at that rate to transport it for any person or persons, so long as it should not interfere with their general trade, nor require a material augmentation of their machinery*." It is true that in a letter written sub-

sequent to the ratification of the arrangement by the board of directors of both companies, the president of the rail road company, after repeating the *terms* of the agreement in the language above quoted, concludes the sentence by saying "it was of course to be understood, that of '*such necessity*' the rail road company would retain the exclusive right of judging." And it is also true that this company conceded to them such right; but it was certainly not less "to be understood" that the right was to be exercised in good faith, and that the arrangement was to continue until the actual existence of the state of things which by its *terms* would authorize its annulment. It was in no view that can be taken of it made dependent upon the mere will and pleasure of the rail road company. In the Appendix to the special report of the 16th of November, 1843, the entire correspondence, which resulted in the consummation of the arrangement, has been published, and, by reference thereto, it will be found that, according to its spirit and terms, it contemplated a continuance until the canal should be finished to Cumberland, and was only capable of being annulled by the rail road company before that event, in case the coal trade between Cumberland and Dam No. 6 should increase to such an amount as to interfere with the usual general trade upon the rail-road, or require a larger outlay for machinery to carry it on than that company might be willing to embark in the business. It is well known that neither of these contingencies have yet occurred, nor does the rail road company now set up any pretence to that effect. On the contrary, they have based their present proceeding on the *smallness* of the trade in question, and on arrangement already made and in progress for and extended trade in *these* (coal and iron) and other articles to the city of Baltimore and *other points* on the line of their road.

The coal trade on the canal during the last year, from which dates its *commencement*, was supplied from Cumberland by the rail road under the arrangement mentioned, and by boatmen who availed themselves of occasional high water in the river to bring down their cargoes, on its natural channel, to Dam No. 6. At that point the coal from both of these sources was introduced into the canal, and it is therefore impossible, from any data in our possession, to determine with accuracy the precise amount supplied in either way. The whole quantity of coal transported on the *canal* in the year 1844 was 4,871 tons, of which about 4,000 tons were probably brought down to Dam No. 6 by the rail road. Some of the reasons why the amount was "inconsiderable" during the year may be found by reference to the communication in the Appendix (marked No. 8,) pages 21 and 22, and we will leave it to others to say whether the facts there presented add any strength to the justification to the rail road company for their late movement. It must likewise be remembered that regular operations in the Cumberland coal business were only *begun* in the spring of 1844, and that in the Pennsylvania coal regions, although only 365 tons were carried to market in the first year, the quantity now amounts to

1,631,669 tons per annum, and that during the last year the increase alone was 368,130 tons.

We have on several previous occasions, as well as in the communication in the Appendix above referred to, explained the object and purposes for which the arrangement with the rail road company was originally entered into. We believed that, as a mere *temporary* expedient, it might serve a useful purpose, in immediately causing the coal mines in Allegany to be worked to a limited extent; and that in some degree it would increase our revenues, even in the present unfinished condition of the canal. But we have never regarded it as a matter of much importance, because, as we have often stated, we were well aware that, under any circumstances the rail road could not be used as an adequate feeder to the canal at Dam No. 6; and we consider it of even less consequence now, since the act for the completion of the canal to Cumberland has been passed, than formerly. We have no doubt, however, if the arrangement had been maintained and carried out in good faith, according to its terms, that notwithstanding all the existing difficulties and disadvantages, and in defiance of the special contracts entered into by the rail road company, the coal trade by the canal would have continued in some measure to increase. But the prohibitory tariff now imposed by the rail road company between Cumberland and Dam No. 6, as intended, will not only prevent this, but it will also compel the coal dealers to forego entirely the superior advantages of the canal transportation, except in so far as the river freshets will enable them to float down the produce of their mines to its present navigable terminus, *until after the work shall be finished to Cumberland, and the navigation be opened to that point.*

When the Chesapeake and Ohio canal reaches that destination, short of which it never was expected to become productive to any considerable extent, it will have opened to it, and will command all those immense sources of trade which we have pointed out in our special report of the 29th of April last, and which, in the progress of years, and in the rapid growth and development of the resources of the country, must increase to a magnitude beyond any estimate that now can be formed of them.

The measure of the Railroad Company, which we have thus commented upon in the foregoing remarks, has been the subject of much inquiry along the line and at both extremities of the canal, which must serve as our apology for the notice we have taken of it. We now dismiss the subject from further consideration. It should, nevertheless, stimulate every friend of the canal and every tax payer of Maryland to increased exertions for the completion of the work to Cumberland; and it should, in an especial manner, rally to our assistance the incorporated coal and iron companies of Allegany county, the value of whose property so essentially depends upon the accomplishment of that great object. After the canal is finished to Cumberland, *it will be beyond the reach of any influence the Railroad Company can bring to bear upon it, and the*

cheapness and facility of transportation which it will afford will always secure to it the heavy trade.

Having very recently, in our special report of the 29th of April last, presented our views at length in regard to the provisions of the act passed at the last session of the Legislature of Maryland "to provide for the completion of the Chesapeake and Ohio canal to Cumberland," we do not deem it necessary at this time to say any thing more on the subject, than that the opinions we then expressed remain unchanged, and have even been strengthened by our subsequent observation and enquiries. During the interval which has elapsed, we have been earnestly engaged in making all needful preparations for carrying the law into effect. Two parties of engineers have been placed on the unfinished portion of the line of the canal, to review and perfect the estimates and stake off the work for contract, and some steps have also been taken towards the procurement of the means for finishing the work; but the Board have as yet been unable to adopt any decisive course for the accomplishment of this object, by reason of the unexpected delay on the part of some of the incorporated companies of Allegany county in executing their guarantees. This delay, we are led to believe, has been occasioned by circumstances in no way affecting their settled purpose to contribute their proportion, and from no abatement of their anxious desire to see the canal completed as early as practicable. The causes which have heretofore prevented them from moving in the matter have now, however, as we are advised, been removed, and we have assurances that their formal action will be had by the middle of the present month. As soon as *their quota* is received, the Board will be able to submit to the Governor of Maryland and the State agents guarantees for the full amount required by the law, secured in a manner that cannot fail to command their approval. The individual guarantees we calculated upon have already been executed and delivered to this company; and the wealth and respectability of the parties whose names are attached to them not only furnish conclusive evidence of their strength, but also afford a cheering proof of the enlightened confidence which is entertained in the productiveness of the Chesapeake and Ohio canal, after it shall have reached its destination.

As we have intimated on a former occasion, when the provisions of the law in regard to the guaranty are fulfilled, we will consider the greatest difficulty as having been surmounted. The completion of the canal to Cumberland will then be secured beyond all ordinary contingencies.

By order of the Board,

JAMES M. COALE,

President of the Chesapeake and Ohio Canal Co.

APPENDIX.

NO. 1.

Schedule of officers in the service of the Chesapeake and Ohio Canal Company in the year ending 31st May, 1845, and of the compensation to which they have been severally entitled.

Names of Officers, &c.	Amount	Total.
1st. In the office at Frederick, viz:		
James M. Coale, President, per annum -	\$1,000	
D. Burkhart, attendance as director \$136 00		
Wm. Darne, attendance as director 112 00		
J. P. Ingle, attendance as director 192 00		
Wm. Price, attendance as director 64 00		
F. Tilghman, attendance as director 160 00		
J. O. Wharton, attendance as director 136 00		
	800	
Thomas Turner, clerk, per annum, - -	1,500	
Robt. Barnard, treasurer and accountant, -	1,200	
Wm. Price, standing counsel - - -	250	
C. B. Fisk, chief engineer - - -	2,000	
		\$6,750
2d. First superintendency, viz:		
J. Y. Young, superintendent - - -	800	
B. F. Mackall, collector - - -	600	
John Moore, keeper locks 1 to 4, and tide -	600	
Frederick Metz, keeper lock 5 and guard -	250	
James Dalzell, keeper lock 6 - - -	150	
James Wilburn, keeper lock 7 - - -	150	
Levi Barrett, keeper lock 8 - - -	150	
O. S. Crawford, keeper locks 9 and 10 - -	200	
W. Burgess, keeper lock 11 - - -	150	
Asa Tarman, keeper locks 12, 13 and 14 -	250	
Hezekiah Metz, keeper lock 15 - 12 50		
William Nevitt, keeper lock 15 - 137 50		
	150	
Thomas Brewer, keeper lock 16 - - -	150	
W. W. Henderson, keeper locks 17 and 18 - - -	138 00	

NO. 1—Continued.

Names of Officers, &c.	Amount	Total.
2d. Second superintendency—Continued:		
Horace Benton, keeper locks 17 & 18 138 00		
	\$276	
David Collins, keeper locks 19 & 20 - - -	200	
R. C. Fields, keeper lock 21 - - -	150	
John Fields, keeper lock 22 - - -	150	
J. Y. Young, keeper lock 23 and guard - - -	200	
John Wells, keeper lock 24 - - -	150	
Asa Aud, keeper Edwards' ferry outlet - - -	50	
		\$4,776
3d. Second superintendency:		
W. S. Elgin, superintendent - - -	800	
L. C. Belt, Point of Rocks, collector - - -	50	
W. S. Elgin, Harper's Ferry, collector - - -	100	
Asa Aud, keeper lock 25 - - -	200	
James Fitch, keeper lock 26 - - -	150	
Thomas Walter, keeper lock 27 - - -	150	
E. Davis, keeper lock 28 - - - \$125 00		
John Plummer, keeper lock 28 - - - 25 00		
	150	
John Walter, keeper lock 29 - - -	175	
William Kuhn, keeper lock 30 - - -	150	
D. Harrison, keeper lock 31 - - -	150	
A. W. Jones, keeper lock 32 - - -	175	
W. S. Elgin, keeper lock 33 and Shenandoah	200	
John Crowley, keeper lock 34 - - -	175	
John Kercheval, keeper lock 35 and guard, &c.	250	
J. L. Jordon, keeper lock 37 - - -	150	
G. Hughes, keeper lock 38 and outlet 83 33		
E. Hayes, keeper lock 38 and outlet 116 67		
	200	
Joseph Gwynn, keeper lock 39 - - -	150	
Andrew McCoy, keeper lock 40 - - -	150	
L. R. Shaw, keeper guard lock 4 - - -	150	
M. Newman, bridge and ferry tender, Noland's ferry - - - - -	150	
		3,825
4th. Third superintendency, viz:		
John G. Stone, superintendent - - -	800	
Eli Stake, Williamsport, collector - - -	300	
Arthur Blackwell, Hancock, collector - - -	300	
Henry Boyd, keeper locks 41 and 42 - - -	200	
Isaac Dodd, keeper lock 43 - - -	150	
Joseph Hollman, keeper lock 44, (water power,)		

NO. 1—Continued.

Names of Officers, &c.	Amount	Total.
4th. Third superintendency—Continued:		
Jacob Motter, keeper guard 5 - - -	\$150	
John Herbert, keeper locks 45 & 46 100 00		
H. Harsch, keeper locks 45 & 46 100 00		
	200	
Daniel Brewer, keeper locks 47 and 50 -	300	
Upton Rowland, keeper locks 51 and 52 -	200	
Hugh Conner, keeper lock 53 - - -	150	
James Finney, keeper guard 6 - - -	200	
		\$2,950
		18,301

RECAPITULATION.

President, directors, and clerks at Frederick - - -	\$4,750
Chief Engineer - - - - -	2,000
Superintendents - - - - -	2,400
Collectors - - - - -	1,350
Lock-keepers - - - - -	7,801
	18,301

THOS. TURNER, *Clerk.*

NO. 2.

General statement of the debts and credits of the Chesapeake and Ohio Canal Company, on the 31st of May, 1845.

DEBTS.

1st. Promissory notes issued by the Company, viz:			
Post notes, 1834, at 4 per cent. interest -	-	\$550 00	
On which interest may be demanded	-	22 00	\$572 00
Post notes, 1837, at 6 per cent. -	-	405 00	
On which interest may be demanded	-	195 30	600 30
Post notes, 1839, at 6 per cent. -	-	5,780 00	
On which interest may be demanded	-	1,955 30	7,735 30
Post notes, 1840, at 6 per cent. -	-	446,455 00	
On which interest may be demanded	-	120,542 85	566,997 85
Notes re-issuable, payable } under \$5	-	5,687 75	
on demand, } \$5 and upwards	-	1,205 00	6,892 75
Bonds issued in lieu of post notes	-	9,328 00	
On which interest has accrued	-	2,403 67	11,731 67
			\$504,529 87

2d. Acceptances and bonds, viz:

Acceptances of the drafts of contractors	-	-
On which interest has accrued	-	-
Bonds issued to creditors	-	-
On which interest has accrued	-	-
Bonds issued to creditors of the Potomac Company, by compromise, under the 12th section of the act of incorporation of this company	-	-
On which annuities are in arrear	-	-

143,305 16
36,325 62

179,630 78

206,724 66
42,102 33

248,826 99

57,548 42
17,564 36

75,112 78

503,570 55

3d. Open accounts, viz:

Balances due to contractors	-	-
On which interest may be claimed	-	-

81,221 70
20,000 00

101,221 70

40,749 40

Balances due on the three superintendencies	-	-
Balances due engineer, officers, and other claims, adjusted or unliquidated	-	-
Balances due for lands acquired, and damages, may be	-	-

8,125 92
30,000 008,125 92
30,000 00

180,097 02

4th. State of Maryland, viz:

Loan of 1835	-	-
On which interest is in arrear	-	-

2,000,000 00
705,000 00

2,705,000 00

NO. 2.—DEBTS—Continued.

Interest in arrear on \$4,375,000, under chapters 386 and 396, 1838, balance	-	\$663,611 94	
Claimed by the Treasurer of the Western Shore of Maryland, for conversion of paper into coin	-	9,975 00	\$3,378,586 94
5th. Miscellaneous, viz:			
Potomac Company—deposited by it with this Company, to satisfy unclaimed dividends of long standing—balance	\$4,113 38	216 45	
Chesapeake Bank of Baltimore, overdrawn	1,110 61		
Interest thereon, say 4½ years		5,223 99	
			5,440 44
			\$4,662,224 82

CREDITS.

1st. Sterling 5 per cent. bonds and coupons of the State of Maryland, remaining after final settlement of the debt and interest due to Barings & Co.	\$19,506 50		
Of which have been sold	15,215 69		
Balance at 68 per cent.	4,290 18 3		\$12,968 10

Due, but not issued to the company, balance under ch 396, 1838		475 0 0	
Coupons accrued upon the same		140 0 0	
At same rate		615 0 0	= 1,858 67
2d. State of Maryland, viz:			
Advance made to her commissioners in 1837, to proceed to Europe to negotiate the eight million loan		\$8,000 00	
Interest on the same 8 years		3,640 00	
3d. Miscellaneous, viz:			
Swan, Gittings and Gunton, trustees, to redeem post notes withheld by them, in suit		56,192 62	
Interest thereon, say 4 years		13,486 21	
Subscriptions to the capital stock of the company remaining unpaid		136,373 16	69,678 83
Of which may be considered uncollectable		100,000 00	
Tolls and rents in transitu		-	36,373 16
4th. In treasury on this date		-	4,000 00
Balance deficient, 1st June, 1845		-	
		-	110,051 99
		-	2,140 38
		-	138,659 14
		-	4,523,565 68
		-	\$4,662,224 82

THOS. TURNER, Clerk.

E. E.

OFFICE CHESAPEAKE & OHIO CANAL Co., Frederick city, May 31, 1845.

NO. 3.

General statement of the receipts into, and payments from the Treasury of the Chesapeake and Ohio Canal Company, from its organization to May 31, 1845.

The receipts arise from the following sources, viz:

Capital stock - - - - -	\$8,222,801 00
State of Maryland loan of 1835 - -	2,000,000 00
Profit and loss - - - - -	200,962 93
Baltimore and Ohio Railroad Company -	268,723 02
Acquisition of land - - - - -	14,471 34
Construction of the canal - - - -	11,261 62
Engineer department - - - - -	2,748 67
Interest - - - - -	290,201 85
Law expenses - - - - -	2,372 08
Potomac Company, general account -	418 52
unclaimed dividends -	366 30
tolls account - -	26,017 20
Tolls - - - - -	481,714 97
Water rents - - - - -	8,788 55
Exchange - - - - -	195,931 53
Bonds in payment of post notes - -	9,328 00
Notes reissuable, under \$5 - - -	5,687 75
\$5 and upwards - - -	1,205 00
Post notes, 1837 - - - - -	405 00
1839 - - - - -	5,780 00
1840 - - - - -	446,455 00
Chesapeake Bank, overdrawn - - -	4,113 38
	<hr/>
	\$12,199,753 71

[E. E.]

NO. 3.—Continued.

General statement of the receipts into, and payments from the Treasury of the Chesapeake and Ohio Canal Company, from its organization to May 31, 1845.

The payments are charged on the following, viz:	
Contingent expenses - - - - -	\$68,039 01
Contingent expenses of the comm'r Ches. and Ohio Canal - - - - -	1,365 40
Profit and loss - - - - -	1,322,105 45
Western section - - - - -	6,686 57
Acquisition of land - - - - -	404,075 37
Construction of the canal - - - - -	8,890,460 34
Engineer department - - - - -	355,717 97
Interest - - - - -	819,659 71
Law expenses - - - - -	28,020 85
Collectors' and lock keepers' salaries - - - - -	48,439 16
Pay of officers - - - - -	133,836 75
Incidental damages - - - - -	233 90
Potomac Company, general account - - - - -	373 65
unclaimed dividends - - - - -	149 85
tolls account - - - - -	22,643 43
Legislative expenses - - - - -	534 88
Postages - - - - -	2,466 33
Printing and stationery - - - - -	16,103 82
Judgm'ts vs. Ch. Eng. and others for suppressing riots in 1839 - - - - -	2,737 22
Swan, Gittings, and Gunton, trustees, &c., in suit - - - - -	56,192 62
M. C. Sprigg - - - - -	4 38
<hr/>	
In treasury, viz:	12,179,846 66
Maryland 5 per cent. sterling bonds, at par - - - - -	\$17,666 67
Bank of Washington - - - - -	2 92
Bank of Potomac - - - - -	48 31
Farmers and Mechanics' Bank of Frederick County - - - - -	33 86
Frederick County Bank - - - - -	2,055 99
Washington County Bank - - - - -	77 56
Cash in safe - - - - -	21 74
<hr/>	
	19,907 05
<hr/>	
	\$12,199,753 71

[E. E.] ROB'T. BARNARD, Treasurer.

Treasurer's Office, Chesapeake and Ohio Canal Co.

Frederick City, May 31, 1845.

Abstract of the receipts into, and payments from, the Treasury of the Chesapeake and Ohio Canal Company, in the year ending May 31, 1845.

The receipts arise from the following sources:		The payments are charged to the following, viz:	
Acquisition of lands	-	Acquisition of lands	\$1,903 61
Capital stock	-	Construction of the canal	57,402 12
Interest	-	Contingent expenses	1,802 87
Law expenses	-	Engineer department	4,108 07
Potomac Company, tolls account	-	Interest	1,732 85
Tolls	-	Law expenses	1,589 61
Water rents	-	Pay of lock keepers	627 00
Thomas Fillebrown, jr.	-	Pay of officers	5,341 85
		Postages	99 21
		Potomac Company, tolls account	-
Balance in treasury May 31, 1844	-	Printing and stationery	385 04
		Post notes, 1840	4,820 00
		Temporary loans	3,000 00
		Profit and loss	10,054 96
		Balance in the treasury this date	92,867 19
			19,907 05
			<u>\$112,774 24</u>

E. E.

Treasurer's Office, Chesapeake and Ohio Canal Company, Frederick City, May 31, 1845.

ROBERT BARNARD, Treasurer.

NO. 5.

OFFICE OF THE BALTIMORE AND OHIO RAILROAD CO.,

May 7, 1845.

SIR: The amount of transportation of coal and iron to Dam No. 6 hitherto has been so inconsiderable as scarcely to authorize a longer continuance of our preparations for its accommodation at the present rates, especially as arrangements already made and in progress for an extended trade in these and other articles to this city, and other points on the line of the road, are of much greater importance to the Company and to the public generally.

I have therefore to acquaint you, that until otherwise ordered, the rates for the transportation of coal from Cumberland to Dam No. 6 will be four cents per ton per mile, and for iron six cents per ton per mile.

I am, sir, very respectfully, your obedient servant,

LOUIS McLANE, *President.*

J. M. COALE, Esq.,

President Chesapeake and Ohio Canal Company.

NO. 6.

OFFICE CHESAPEAKE & OHIO CANAL CO.,

Frederick, May 9, 1845.

SIR: I have the honor to acknowledge the receipt of your letter of the 7th instant, informing me that, "until otherwise ordered, the rate for the transportation of coal from Cumberland to Dam No. 6 will be *four cents* per ton per mile, and for iron *six cents* per ton per mile."

Whether the reasons given in your letter are sufficient to authorize a departure from the arrangement entered into between the two companies in September, 1843, and whether the interests of the "public generally" will be subserved by the imposition of a *prohibitory tariff* between Cumberland and Dam No. 6, are questions upon which I think impartial men will differ with you.

I will, however, lay your letter before the Board of Directors of this company at their next meeting; and am, very respectfully your obedient servant,

J. M. COALE,

President Chesapeake and Ohio Canal Co.

Hon. LOUIS McLANE;

President Baltimore and Ohio Railroad Co.

8—Doc. J.

NO. 7.

Extract from the Journal of Proceedings of the Board of President and Directors of the Chesapeake and Ohio Canal Company, May 21, 1845.

Resolved, as the opinion of this Board, That, according to the true construction and meaning of the arrangement entered into in September, 1843, between this company and the Baltimore and Ohio Rail Road company, for the transportation of coal and iron between Cumberland and Dam No. 6, the Railroad company cannot, in good faith, charge more than "two cents per ton per mile for the transportation of coal," nor more than "the rates fixed by their then existing tariff" for iron between those points, "so long as the said trade does not require a material augmentation of their machinery, nor interfere with their general trade;" and that neither the smallness of the coal and iron trade between Cumberland and Dam No. 6, nor any special contract for the transportation of the same kind of tonnage "to the city of Baltimore, or to other point on the line of their road," can authorise a departure from said arrangement.

Resolved, nevertheless, That the subject be dismissed from further consideration.

Resolved, That a copy of the foregoing resolutions be transmitted to the Board of President and Directors of the Baltimore and Ohio Railroad Company.

 NO. 8.

Communication from the President and Directors of the Chesapeake and Ohio Canal Company, to the Governor of Maryland, January 15, 1845.

To his Excellency Thomas G. Pratt, Governor of Maryland:

OFFICE CHESAPEAKE & OHIO CANAL CO.,

Frederick, January 15, 1845.

SIR: In the sixteenth annual report of the President and Directors of this company, a copy of which was transmitted to your predecessor in office, and by him was sent to the Legislature in connexion with his annual message, we gave a detailed account of the transactions of the company down to the 31st of May, which was the end of our fiscal year. With a view of presenting to the General Assembly a history of the operations of the company during the entire calendar year of 1844, and of exhibiting the financial condition of the company at the close of the year, we have deemed it expedient to make this additional communication.

In the appendix will be found several tabular statements of the clerk and treasurer, to which we respectfully refer for information in regard to the fiscal affairs of the company on the 31st of December, 1844.

No. 1 is a general statement of the debts and credits of the company.

No. 2 is a particular statement of the debts due to the State of Maryland, including principal, interest, and guarantied dividends.

No. 3 is a particular statement of the debts of the company, other than those due to the State of Maryland, including principal and interest.

The £21,475 sterling coupons, cut from bonds or redeemed and paid by this company in part payment of the first half year's interest guarantied on the bonds issued by the State of Maryland in favor of this company, under the acts of December session, 1838, chapters 386 and 396, of which we have spoken in our last annual report, (pages 18 and 19,) are still in the hands of the company, ready to be delivered up to any officer of the State properly authorized to receive them. Pursuant to the purpose announced in the paragraph alluded to, we have since tendered them to the present treasurer of the State, but, but like his predecessor in office, he also declined to receive them, on the alleged ground of a want of authority to do so. We would therefore respectfully suggest, that a resolution be passed by the General Assembly, authorizing and directing the treasurer to receive and receipt for the same, in order that they may be cancelled and destroyed, at the time and in such manner as may be provided for the cancellation of the coupons received by the State in payment of its taxes.

During the past year the canal has been subjected to but few casualties. Only two slight breaches occurred, which interrupted the navigation but a few days, and a suspension of about three weeks took place during the excessive drought in the month of September, in consequence of the low water in the river, and the defective condition of Dams Nos. 4 and 5. These Dams were promptly repaired, so as to afford a sufficient present supply of water for the navigation; and, with the addition of a few more repairs, and gravelling, which ought to be attended to as soon as the company can command means to accomplish it, a recurrence of a similar state of things would be thoroughly provided against. In the annual report of last June, the board indicated certain improvements on the Georgetown level and its appurtenant works, which were called for by a due regard to a judicious economy. Since then, though not to the extent recommended, the board have caused some improvements to be made on that part of the line, and have contracted for others, which are now in progress, and will be completed during the winter. The improvements finished are, the tightening of the Little Falls feeder, by which that level is supplied with water, and the raising of the guard banks of the canal at such points as are most exposed to the overflow of the river. The improvement in progress is the construction of a tum-

bling waste, two hundred and fifty feet long in the clear which it is thought will hereafter furnish a sufficient security against breaches on that portion of the canal in ordinary freshets. The board have only been deterred from making this improvement of the dimensions mentioned in the June report by the limited extent of their means. In addition to the work above mentioned, the Shenandoah outlet lock, near Harper's ferry, has been raised at its river end, and the adjacent canal banks somewhat elevated. This also has been a point where breaches have been frequent, from the overflow of the river; but the improvement alluded to will hereafter form an effectual barrier, and render this part of the line secure. The whole sum expended in the above mentioned improvements, to the close of the year, amounts to \$2,981; and the entire cost, when completed, will not exceed \$5,500.

The saving from breaches may more than compensate for this outlay in a single year.

The total revenue of the company for the year ending

the 31st of December, 1844, amounts to the sum

of - - - - - \$55,910 91

And was received from the following sources, to wit:

Tolls, (for the receipts of each month, see

Appendix, No. 4) - - - - - \$52,674 2

Water rents, - - - - - 2,555 00

Mole rents, - - - - - 390 00

Rents of houses, - - - - - 291 67

And the current expenses of the year ending

as aforesaid (for the expenses of each

month, see appendix, No. 5) amounted

to the sum of - - - - - 47,371 76

As follows, to wit:

Improvements, or work chargeable to construction - - - - -

7,988 88

Repairs, ordinary - - - - -

15,849 65

Repairs, extraordinary, being principally unfinished work from the breaches of

1843 - - - - - 4,070 77

Salary of President - - - - -

1,000 00

Pay of Directors - - - - -

720 00

Salary of Clerk - - - - -

1,500 00

Salary of Treasurer - - - - -

1,200 00

Salary of Chief Engineer - - - - -

2,000 00

Salary of Counsel - - - - -

250 00

Salary of three Superintendents - - - - -

2,400 00

Salary of Collectors - - - - -

1,350 00

Salary of Lock Keepers - - - - -

7,963 59

Incidental - - - - -

3 50

Office rent, law, and other expenses - - - - -

1,075 37

Leaving a surplus of income over the expenditures in the year 1844, of

8,539 15

Of this amount, there was in the treasury, or in transitu, on the 1st of January instant, the sum of \$4,295 97, which was retained to meet the current expenses, and supply any deficiency that might arise during the winter, when the navigation of the canal will be closed by ice; and the residue, together with the larger portion of the fund appropriated to the purpose as mentioned in the annual report, have been disbursed in payment of loans negotiated with the banks, to meet the pressing demands of the company in the year 1843; and of debts due and in arrear for annual expenses. The balance still due and unpaid for repairs and annual expenses from previous years, according to the statement of the Treasurer and Accountant, is \$50,000.

This, being a debt chargeable on the gross revenues, will be paid by the remaining means in possession of the company to the extent thereof, and the residue by instalments, from time to time, as a surplus may be realized over the amount necessary to defray the current expenses, which, by a regulation established in April last, are now paid in cash as they accrue. The benefits of this regulation have fully met the expectations expressed by the Board in their annual report, as is clearly demonstrated by the diminution in the ordinary expenses of the nine months during which it has been in operation.

The total current expenses of the year 1844, notwithstanding an extra outlay of \$2,981 for *improvements*, as we have before mentioned, exhibit a decrease of \$1,478 24, compared with the expenses of 1842, and of 36,421 04, compared with those of 1843, as will appear from the following summary:

	1842.	1843.	1844.
Costs of repairs, ordinary and extraordinary, including work chargeable to construction -	\$26,750	\$61,957 61	\$27,909 30
Pay of President, Directors, Clerk, Treasurer, Engineer, Superintendents, Collectors, Lock Keepers, Office rent, and all other charges. - -	22,100	21,835 19	19,462 46
	48,850	83,792 80	47,371 76

These totals show the entire expenses of the Company on the finished portion of the canal to be, for the year 1842, \$363 per mile per annum; for 1843, \$623 per mile per annum; and for 1844, \$352 per mile per annum. The expenses of 1842 have heretofore been regarded as a fair standard of the annual expenses of the company; and the large expenditure of 1843 is attributable to extraordinary causes, which have been fully explained in former communications and reports. We think we are fully warranted

in saying that the expenses incurred during the last year are less than those of any previous year, since the canal has been finished to its present navigable terminus. And, whilst we have the satisfaction to make this statement, we may also add, that the trade on the canal has been greater, and the actual *available* revenues of the company have been larger, than were ever before realized in a single year. It is true that, according to the published statements of the company, the tolls in 1841 appear to have amounted to \$57,012 29, and in 1842 to \$56,005 80; but during those years, and several years previously, they were to a great extent receivable and collected in the depreciated scrip of the company, which diminished the scrip debt, but added little to the available means of the Board; and the tariff of tolls on the principle articles transported on the canal was, in the years above *named*, raised to the *highest point* authorized by the charter, so that, as far as practicable, the increased charge might make up for the diminished value of the larger portion of the funds in which it was paid. In this way, the nominal receipts of the years 1841 and 1842 were considerably augmented, but at the same time, as in the two years immediately preceding, the actual current expenses of the company were in a great measure left unpaid. These unliquidated balances, and the *deficit* of 1843, form the debt in arrear for repairs and officers' salaries, which the Board are now discharging in the manner alluded to.

On the 20th of June, 1843, the tolls on the principal articles of transportation were restored to their former cash rates, and *current bankable funds* were required in all cases to be paid. During the two preceding years, (to wit, from the first of May, 1841, to the 20th of June, 1843,) the toll on flour, from which by far the largest portion of our revenue is derived, was at the rate of two cents per ton per mile for any distance it might be transported on the canal. By the regulation of the 20th of June, this toll was established at two cents per ton per mile for the first twenty miles, and one and a half cent per ton per mile for the residue of the distance; and these rates have ever since been uniformly maintained. Although the toll thus charged on flour on the Chesapeake and Ohio Canal is much higher than the toll on the same article on the New York canals, or for equal distances on the Susquehanna and Tide Water canals, the cost of transportation on our canal is less than that upon any other improvement that can come in competition with it for the trade in question; and the fruitless effort made by the Baltimore and Ohio Rail Road Company to withdraw the flour trade from the canal to their road, by a reduction of their charges on the 10th of October last, has only tended to demonstrate more clearly the utter inability of that road to compete with the canal upon *equal terms* in the transportation of heavy freight. Notwithstanding the Railroad company reduced their charges on flour about one-fourth of their previous rates from points within the range of the canal, the reduction has in no perceptible degree affected the trade of the canal. The number of barrels of flour transported on the Chesa-

peake and Ohio Canal during the last year, compared with the two preceding years, is as follows;

1842.	1843.	1844.
151,966 barrels.	156,242 barrels.	172,796 barrels.

The large increase of the flour trade on the canal during the past year, as thus exhibited, is principally attributable to the fact that the farmers and millers of the western counties of Pennsylvania, bordering on this State, have found out that the Chesapeake and Ohio Canal affords them the cheapest and most convenient mode of transportation to market, and they have consequently adopted it as their route. The trade from that quarter is gradually increasing, and we think it will continue to increase as the facilities offered by our canal become more widely known and appreciated.

The whole amount of coal carried down from Dam No. 6 during the past year was 4,871 tons. This falls short of what was expected at the time the arrangement was made with the Baltimore and Ohio Rail Road Company, as mentioned in the special report of the 16th of November, 1843; but the partial failure is susceptible of an easy explanation. Previous to the formation of that arrangement, and down to the period of its consummation, we were informed by the coal dealers, at whose instance it was proposed, that the rail road company had positively declined engaging in the transportation of coal on their road as a regular business, but merely consented to carry it occasionally, when there was a deficiency of other freight to make out their usual trains. This company, consequently, had good reason to expect that, by effecting the arrangement, the whole existing coal trade of the Cumberland region would be carried on the rail road to Dam No. 6, and be there transferred to the canal. Very soon, however, after the arrangement in question was entered into, the rail road company departed from what was regarded their settled policy, and made a contract with the Maryland and New York Coal and Iron Company, which is, *at present*, by far the most extensive operator in the coal and iron business in Allegany county, by which they secured to themselves exclusively the monopoly of the trade of that company for five years. The contract provides for the transportation of 52,500 tons of coal; iron, &c., on the rail road *to Baltimore*, at a charge of only one and one-third cent per ton per mile, whilst from Cumberland to Dam No. 6 the charge is two cents per ton per mile. By this operation, much the largest portion of the trade this company immediately calculated upon in making the arrangement has been diverted from the canal to the rail road, and the quantity of coal carried down, being mainly the produce of individual operators, has consequently been small.

In view of this plain brief statement, we think the rail road company have but little cause for the self-complacency with which they comment upon the failure of the arrangement to realize, to

the extent expected, the partial and temporary advantages we anticipated from it.

In their last annual report, and on other occasions, the rail road company have alluded, with particular emphasis, to the fact, that, in proposing the arrangement, this company based their estimates of its feasibility upon the charge of two cents per ton per mile between Cumberland and Dam No. 6, and did not stipulate for a smaller rate. It is true, we did not, and for the plain reason mentioned by the rail road company in their last annual report. "That charge had been previously established by them as the *fixed rate* for the transportation of coal on their road, without regard to time, distance, or quantity," when they consented to carry it; and as it was in this manner that the canal company desired them to engage in the *regular* transportation of the article to Dam No. 6, until the canal could be completed to Cumberland, which we then hoped would be accomplished in about two years, we could not, with any sort of propriety, have solicited them to charge less per ton per mile for that distance than their "fixed rate" on other parts of their road, or to Baltimore. Another reason, and we give it in all candor, was because we did not believe that the rail road company could afford to carry coal for less than two cents per ton per mile, with any reasonable expectation of profit; and on this point, our opinion remains unchanged. Apart from other objections, it appears to us manifest, that a performance such as that which forms the basis of the "revised estimates" of the rail road company, would require a harmony and regularity of operations which are never attained in the concerns of this mundane world, and without which their calculations, however honestly intended, are purely fallacious.

The Baltimore and Ohio Rail Road Company, on page 19 of their report, state, that "all estimates of the actual cost of transportation upon English railways, of which we have any accurate knowledge in detail, are of *a date so remote* as to embrace only the earlier description of locomotive power, possessing from a third to a fifth of the capacity of that proposed to be employed on their road in the transportation of coal, and contemplate the use of a description of cars weighing one ton and three-tenths, and with a capacity to carry two tons and six-tenths of coal;" that "conforming the actual cost, according to the experience of England, and the description of machinery there employed, to the improved engines and cars to be used by the rail road company, it will be found to correspond with their present estimates, and to verify them in every particular."

From the above quotations, it will be seen that the asserted correspondence of the estimates of the Baltimore and Ohio Rail Road Company with the experience of England is merely based upon an arithmetical calculation, in which the cost of transportation on the English railways, with "the earliest description of locomotive power," is first set down, and the calculated saving by the newly applied machinery is subtracted from the amount. In this way,

the estimates are said to conform to the early experience of railways in England.

Now, we have been so fortunate as to obtain "accurate knowledge, in detail," of the actual cost of transportation on the rail roads in England, at the *present day*, under all the lights of modern improvement, and with ample and unlimited means to apply them to use.

During the last summer, Charles Ellet, Jr., Esq., of Philadelphia, a civil engineer, who stands in the front rank of his profession in this country, visited England and the continent, for the express purpose of ascertaining, by personal observation and inquiry, the actual cost of transportation, as demonstrated by experience, and the relative advantages of canals and rail roads in those countries where the system of modern improvement has been carried to its greatest perfection. On the 18th of last month, the president of this company, with a view of obtaining authentic information on these subjects, addressed to Mr. Ellet a brief note of inquiry in regard to the result of his observations, to which he obligingly replied, in the highly interesting communication which will be found in the appendix, marked No. 6, merely premising that Mr. Ellet is the author of the essay entitled, "A popular exposition of the incorrectness of the tariffs of toll in use on the public improvements of the United States," and, with a complimentary allusion, is cited as *authority* by the President of the Baltimore and Ohio Rail Road Company, in document FF of the last session, in regard to "the principles upon which the rates on which the Baltimore and Ohio Rail Road are adjusted," we would respectfully invite special attention to the facts and views presented by him in the communication alluded to.

It will there be seen, that every canal in England, of any consequence, has a railroad running along side of it; that the present actual *minimum cost* of transportation on railroads is *two cents* per ton per mile;

That a half a cent per ton per mile, though below the average, is not the minimum of the cost of *freight*, on a good canal, with horse power;

That the use of *steam tug boats*, to the transportation of both freight and passengers, on canals, has been *successfully* introduced in England, on canals less favorably constructed and located, and of far inferior dimensions to the Chesapeake and Ohio Canal;

That the application of this new motive power to transportation on canals has so *greatly reduced the cost* on this kind of improvement, as to set aside all former calculations. (See Mr. Ericsson's letter referred to on pages 26 and 27 of the last annual report of the President and Directors of the Chesapeake and Ohio Canal Company, in which the cost is set down at one-quarter of a cent per ton per mile;)

That the railroads cannot compete with the canals in the transportation of heavy freight, although the former are constructed in

the most approved manner, and are perfect in their operating machinery, whilst the canals in that country are generally small, and of inferior construction;

That, in some instances, the canals have even been successful rivals of railways in the transportation of passengers;

That, where each improvement is confined to its appropriate sphere of duty, they are "in no sense rivals," but mutually contribute to augment each other's trade and transportation;

That on the Stockton and Darlington Railroad, which is the most successful work of the kind in England, and is said to be capable of working cheaper than any other in that country, the charge for the transportation of "Seaborne coals" is $2\frac{5}{8}$ cents per ton per mile, and of land "Sales coals," about $4\frac{1}{2}$ cents per ton per mile;

That on the Taff Vale Railroad, which is the competitor of the Glamorganshire Canal for the coal and iron trade of South Wales, the charges are—

	Iron	Coal
For the use of the road - - -	1 d.	$\frac{2}{3}$ d.
Locomotive power - - -	$\frac{1}{2}$ d.	$\frac{1}{2}$ d.
Cars or wagons - - -	$\frac{1}{4}$ d.	$\frac{1}{4}$ d.
	<hr/> 1 $\frac{3}{4}$ d.	<hr/> 1 $\frac{5}{8}$ d.

Which are equivalent to three and a half cents per ton per mile for iron, and two and five-sixths cents per ton per mile for coal. And yet, with these charges, that the Railroad Company, last year, yielded no dividend to its stockholders, whilst the Canal Company, its rival and competitor, "has always declared a dividend of *eight per cent.* per annum; to which amount it is limited by act of Parliament."

That the result of the competition for tonnage between the London and Birmingham Railway, which cost upwards of \$30,000,000, and the Grand Junction Canal, is, that the canal actually carries an annual trade of 1,500,000 tons, whilst the railroad only conveys about 150,000 tons; and that the increase of trade on the canal, which has taken place since the completion of the railway, is equal to the whole quantity carried by the latter work; that both works are, nevertheless, profitable—the railway from its passenger receipts, the canal from its profits on tonnage.

That the Birmingham and Liverpool Junction Canal and the Grand Junction Railway, both of which went into operation about the same time, are competitors with each other, and joint competitors of an earlier improvement; that the canal now carries nearly 400,000 tons per annum, and the railway about the fourth part of that quantity.

That the Leeds and Liverpool Canal, which is mainly supported by its coal trade, carried, in 1832, 472,000 tons, and in 1843, 801,000 tons; whilst the Liverpool and Manchester Railroad, which offers a much shorter route from the coal field to Liverpool,

and which has been in operation since 1832, has at this time an annual trade of only 180,000 tons.

We have thus culled from the communication of Mr. Ellett, and epitomized, a few of the most striking facts developed by his observations. To be fully understood and appreciated, however, the whole communication should be read. It will be sufficient, we think to satisfy the most incredulous, that, when finished to Cumberland, the Chesapeake and Ohio Canal need entertain no apprehension from the rivalry and competition of the Baltimore and Ohio Railroad; and that the experience of the railroads in England which are "incomparably superior to any results, which we have obtained or are likely soon to obtain in this country," is altogether at war with "the revised estimates." It is not our purpose to dwell again upon the manifest and extreme impolicy of stopping the canal at Dam No. 6, in the vain hope of making or using the Railroad, to any important extent, as a feeder to its trade at that point. In the special report of the 16th of November, 1843, and again in the sixteenth annual report, which is now in the hands of the Legislature, we have fully discussed this subject. In the last mentioned report, we have met the question in the form in which it now presents itself; and we will here merely add, that the recently developed policy of the Railroad company, and all our subsequent observation and reflections, have only tended to strengthen and confirm the opinions we therein expressed. We believe that the effect of such a measure would, for the time being, be a virtual surrender of the Canal to the mercy of a rival corporation, which is even now seeking to deprive it of the slender trade upon which it depends for its support. We cannot think that the Legislature of Maryland will consent to a course so suicidal and so unjust—suicidal as regards the great interest which the State has in this work; and unjust as respects the numerous creditors to whom the company is indebted for work done in the construction of the canal, some of whom, with claims on the company to the amount of thousands of dollars, are now in absolute poverty, anxiously looking to the completion of the work as their only hope of relief. It may not be improper in this connexion to present briefly to the view of the Legislature the vast difference between the State's interests in the two works.

In the main stem of the Baltimore and Ohio Railroad company the entire available subscription of the State at this time amounts only to \$500,000.

In the Chesapeake and Ohio Canal Company, the interest of the State on the 1st of January, 1845, is as follows:

Original subscription, as a common Stockholder of the Company under the act of 1825, chap. 180, sec. 19.	\$500,000 00
Subscription in stock and debts of the Potomac company, which cost the State	163,724 44
Subscription under the act of 1833, chap. 239	125,000 00
Subscription, (preferred stock) 1855, chap. 395	3,000,000 00

Subscription, (preferred stock,) 1838, chap 396	-	1,375,000 00
Amount due for interest, &c., on the amount subscribed for the preferred stock, which was guaranteed by mortgage for three years ending 1st July, 1842	-	663,611 94
Guaranteed <i>dividends</i> in arrear to the 1st of January, 1845, and payable out of the <i>nett profits</i> of the canal	-	656,250 00
Loan to the Chesapeake and Ohio Canal Company, under the act of 1834, chap. 241	-	2,000,000 00
Interest due and in arrear on said loan to the 1st of January, 1845	-	655,000 00
Premium charged by the Treasurer of Maryland for converting paper into coin, to pay such part of said interest as has been paid from the Treasury	-	9,975 00
Amount of the entire interest of the State of Maryland in the Chesapeake and Ohio Canal Company on the 1st of January, 1845	-	<u>9,148,561 38</u>

According to the recent report of the Treasurer of the Western Shore of Maryland, the sum of \$7,194,666 67 of the funded debt of the State, to pay the interest on which the people are now taxed, was contracted on account of the above-mentioned investments in this company.

In your inaugural address, you, sir, have well said, that "a sufficient time has transpired to enable us to say that this investment will, WITHOUT FURTHER LEGISLATION, remain a continued burden upon the State, until it is paid off by the operation of the sinking fund established by existing laws"—and that "*the true interests of the State require the completion of the canal to a more western terminus than Dam No. 6.*" In the expression of these sentiments, you but gave your official sanction to opinions which we have long entertained, and a conviction of the truth of which has animated and cheered us on, amidst a host of difficulties, in our repeated and earnest appeals to the General Assembly. We trust that the time has now arrived when prompt and efficient action will be had upon this subject, and that the Legislature will not turn aside their attention to any alternative.

It is true, that, assuming their ability to fulfil it, a binding obligation on the Baltimore and Ohio Rail Road Company, to carry tonnage of every description, at the low charge mentioned by them in their recent publication, to and from Dam No. 6, in connexion with the trade of the canal, whenever and in such quantities as it might be offered for transportation by any person or persons, and to an extent adequate to the realization of a revenue sufficient to pay the annually accruing claims of the State upon this company, might obviate some of the objections we have heretofore urged in reference to this subject; but such an arrangement is altogether

unattainable, and we would have no faith in its endurance, if it were entered into. Incorporated companies may sometimes feel themselves justified in agreeing to carry freight at cost, or less than cost, and even make themselves liable to pecuniary penalties for the non-performance of stipulated agreements, in order to accomplish special objects, or obtain other great advantages; but, without such inducements, they are not likely to bind themselves by obligations; and when they do so, and the objects and advantages are secured, modes are seldom wanting by which they are enabled to get rid of the onerous undertaking. But the measure which you, sir, have suggested, of obtaining, if practicable, a more enlarged and regular use of the rail road to and from Dam No. 6, *until the canal can be completed*, presents the subject in a different aspect; and the adoption of the same, if it can be effected, should interpose no obstacle to the *immediate* passage of a law for the completion of the work. Even if a law were now passed, waiving the liens of the State, and authorizing the company to finish the canal upon a pledge of its resources, in the most favorable view of the case, nearly two years must elapse before it could be finally accomplished, and in the mean time, every expedient should be resorted to, to augment our revenue; towards which object the one mentioned, if it can be fully secured, might materially contribute. A further procrastination of the law for completion, which must sooner or later, be passed, only increases existing evils, whilst the benefits and advantages that would result from a *present* enactment are numerous and manifest. Around the law, the Legislature can throw any guards which prudence may dictate, so as not to impair its efficiency. This company only asks to be relieved from the encumbrance which now presses it to the earth, and paralyzes all its efforts for recuperation, in order that it may be able to exercise its own energies to recover its position, and, in due season, afford some relief to the State. From present indications, the Legislature is determined to pass all laws necessary to reinstate the credit of the State, and meet its liabilities; and a law providing for the completion of the Chesapeake and Ohio Canal would, in our opinion, be an important auxiliary to any system that may be devised in that behalf. The two classes of laws would mutually contribute to the efficiency of each other. As regards the money market, the present appears to be a propitious time for obtaining the funds to finish the work; capital is abundant, and the tendency of the day is to investments in internal improvements. The canal sites have long since been occupied, numerous rail road companies have recently been incorporated in England. It is stated in the public journals, that within the last twelve months, new companies have commenced operations in that country, with an aggregate capital exceeding fifty millions of dollars, whilst, as will be seen from Mr. Ellet's communication, the stocks in the old *canal* company still range at from double to nearly ten times their par value. We hope, therefore, that the State of Maryland will allow this company to avail itself of the present opportunity; and that if the Legislature should

advise a further arrangement with the Baltimore and Ohio Rail Road Company, it will only be one of a subordinate and auxiliary character, and *after an efficient law shall be passed, providing for the completion of the Chesapeake and Ohio Canal at least to Cumberland, at the earliest practicable period.*

We would also respectfully state, that the funding of the existing debts of the company, and placing them on an equitable basis, is a measure called for by considerations of both justice and expediency, and calculated in its effects to promote the general interests of the company. No system for the re-establishment of the faith and credit of the company can be perfect without a measure of this character, and we therefore earnestly commend it likewise to the favorable consideration of the General Assembly.

By order of the Board:

JAMES M. COALE,
President of the Chesapeake and Ohio Canal Co.

APPENDIX TO THE COMMUNICATION.

STATEMENT NO. 1,

Being a general statement of the debts and credits of the Chesapeake and Ohio Canal Company to the 31st of December, 1844.

DEBTS.

Promissory notes, of various denominations, issued by the Company	-	\$463,792 75	
On which may be demanded interest	-	112,438 70	\$576,231 45
Bonds issued in lieu of scrip	-	9,328 00	
On which has accrued interest	-	2,290 59	11,618 59
Bonds issued to contractors and other creditors	-	206,934 66	
Acceptances	-	143,965 16	
On which has accrued interest	-	-	350,899 82
			70,350 72
			421,250 54
Balance due to contractors and others	-	80,332 94	
On which has accrued interest	-	14,400 00	94,732 94
			\$587,850 04
			515,983 48

STATEMENT No. 1—Continued.—DEBTS.

Balances due to the three Superintendents, Engineer, &c., as near as can be ascertained	-	-	-	\$50,000 00
Balances for lands and damages yet unpaid—estimated	-	-	-	30,000 00
Bonds due to creditors of Potomac Company	-	-	57,548 42	
Annuities thereon in arrear	-	-	16,086 98	
Unclaimed dividends of Potomac Company	-	-	216 45	
				73,851 85
State of Maryland loan of December session, 1834	-	\$2,000,000 00		
Interest in arrear	-	655,000 00		
Premium on conversion of paper into coin	-	9,975 00		
			2,664,975 00	
Interest, cost of exchange, remittances, commissions, &c., to pay coupons in London for three years—balance unpaid	-	-	663,611 94	
				3,328,586 94
Chesapeake Bank of Baltimore—overdrawn	-	-	4,113 38	
Interest accrued on this overdraft, say	-	-	1,007 78	
				5,121 16
				4,591,393 47

STATEMENT NO. 1.—Continued.—CREDITS.

Maryland 5 per cent. sterling bonds and coupons, remaining after final settlement of the debt and interest due to Baring, Brothers, & Co. Of which have been sold, and the proceeds applied to discharging the current expenses and repairs of the damages of 1843	£19,506 5 0		
	14,284 1 9		
Balance at 70 per cent.	5,222 3 3	\$16,246 73	
Balance not yet issued to the Company under chap. 396, 1838	475 0 0		
Coupons accrued on do.	130 12 6		
At 70 per cent.	605 12 6	1,884 17	\$18,130 90
State of Maryland advanced to her Commissioners in 1837, to proceed to Europe to negotiate the eight millions loan	-	8,000 00	
Interest on the same 7 $\frac{1}{2}$ years	-	3,640 00	
Subscriptions to the capital stock remaining unpaid	-	139,804 16	11,640 00
Of which may be considered uncollectable	-	100,000 00	
Swan, Gittings, and Gunton, trustees, withheld by them	-	56,192 62	39,804 16
Interest on the same 3 $\frac{1}{2}$ years	-	12,081 41	68,274 03

STATEMENT NO. 1.—Continued—CREDITS.

Balance in the hands of Superintendents, Collectors, and Treasurer, and rents not collected, though charged to Superintendents -	-	-	-	4,295 97
Balance deficient -	-	-	-	142,145 06
				4,449,248 41
				<u>\$4,591,393 47</u>

E. E.

OFFICE CHESAPEAKE AND OHIO CANAL COMPANY, Frederick January 14, 1845.
THOMAS TURNER, *Clerk.*

STATEMENT NO. 2,

Showing the amount and character of the debts due from the Chesapeake and Ohio Canal Company, to the State of Maryland, December 31, 1844.

1. Loan under act of December session, 1834 - - - -	\$2,000,000	
Interest thereon in arrear to this date	655,000	
Premium charged by the Treasurer W. S. Maryland, for conversion of paper into coin - - -	9,975	
		\$2,664,975 00
2. Interest, cost of exchange, commissions, &c., on remitting to London, by the Treasurer W. S. to pay coupons under acts of 1838, chapters 386 and 396 - - -	- -	663,611 94
3. Guarantied dividends on the subscription made in virtue of said acts, payable out of the nett profits of the Canal - - -	- -	656,250 00
		<u>\$3,984,836 94</u>

E. E.

ROB. BARNARD, *Accountant.*

OFFICE CHES. AND OHIO CANAL Co.,

Frederick City, January 14, 1845.

STATEMENT No. 3.

Of the debts of the Chesapeake and Ohio Canal Company, other than those due to the State of Maryland, December 31, 1844.

These consist of—1. Debts due to contractors	\$72,036 63		
For cement, supplies, and old balances unadjusted	7,296 31		
Unascertained, possibly	1,000 00	\$80,332 94	
Upon which interest may be demanded	-	14,400 00	\$94,732 94
2. Fiscal debts, viz:			
Bonds to creditors	206,934 66		
Acceptances	143,965 16		
On which interest has accrued	350,899 82		
	70,350 72	421,250 54	
Promissory notes (scrip) issued and outstanding	463,792 75		
Bonds issued in exchange for scrip	9,328 00		
On which interest may be demanded	473,120 75		
	114,729 29	587,850 04	
			1,009,100 58

Proposed to be funded { Principal debt	-	-	904,353 51	
Interest	-	-	199,480 01	
3. Bonds issued to creditors of the Potomac Company, for claims adjusted under the 12th section of the act of incorporation of the Chesapeake & Ohio Canal Co., payable at the pleasure of this Company, in virtue of a resolution of the stockholders, passed 24th March, 1834	-	-		1,103,833 52
Annuities (interest on said adjusted claims) in arrear	-	-	57,548 42	
Unclaimed dividends of the Potomac Company, deposited with this Company in trust, balance remaining unclaimed	-	-	16,086 98	
	-	-	216 45	73,851 85
4. Debts due and in arrear for current expenses and repairs, all which are to be paid from the accruing revenues and other means in possession of the Company, as nearly as can be ascertained	-	-	-	50,000 00
5. Balances due for lands acquired, and for incidental damages, estimated at	-	-	-	30,000 00
6. Overdraft in Chesapeake Bank	-	-	4,113 38	
Interest thereon, say 4 $\frac{1}{2}$ years	-	-	1,007 78	
	-	-		5,121 16
				<u>1,262,806 53</u>

E. E.

ROBT. BARNARD, Accountant.

OFFICE CHESAPEAKE & OHIO CANAL CO.,
Frederick City, January 14, 1845.

STATEMENT No. 4,

Exhibiting the amount of Tolls accrued upon the Chesapeake and Ohio Canal for each month of the year 1844.

January	\$682 02
February	16 95
March	6,362 08
April	5,792 20
May	6,258 25
June	5,129 39
July	2,206 67
August	6,362 03
September	2,756 46
October	6,080 90
November	6,315 83
December	4,711 46
	<hr/>
	\$52,674 24

THO. TURNER,

Clerk Chesapeake and Ohio Canal Company.

OFFICE CHESAPEAKE & OHIO CANAL Co.,

Frederick, January 14, 1845.

List of the principal articles and quantities transported on the Chesapeake and Ohio Canal, during the year 1844, ending December 31.

DESCENDING.

Flour, barrels	172,796
Whiskey, barrels	4,811
Wheat, bushels	199,620
Corn, bushels	173,023
Oats, bushels	39,000
Corn meal, bushels	15,631
Bran and other mill offal	76,683
Wood, cords	6,802
Lime, tons	1,118
Limestone, perches	6,127
Coal, tons	4,871
Pig iron, tons	443
Lumber, board measure, about 1,000,000 feet.	

LIST—Continued.

ASCENDING.

Plaster, tons	-	-	-	-	-	4,838
Salt, tons -	-	-	-	-	-	1,295
Fish, salted, barrels	-	-	-	-	-	2,075

In addition to the above enumerated articles, there were transported considerable quantities, in the aggregate, of other articles, such as fruits, potatoes, turnips, hay, straw, shingles, laths, coopers' stuff, groceries, &c., both in the ascending and descending trade.

THOMAS TURNER, *Clerk.*

NO. 5.

Statement of the entire expenditures of the Chesapeake and Ohio Canal Company in the year ending 31st December, 1844.

ON THE THREE SUPERINTENDENCIES.

Dates.	Construction.	Repairs, ordinary.	Repairs, extraordinary.	Pay of superintendents, collectors, and lock keepers.	Incidentals.	Aggregate per month.
1844.						
January	-	\$420 26	1,150 03	\$979 24	-	\$2,549 53
February	-	462 75	662 57	979 27	-	2,104 59
March	-	761 86	939 51	979 18	-	2,680 55
April	\$362 43	1,143 70	324 40	975 11	-	2,805 64
May	585 88	1,174 76	524 26	975 11	\$2 00	3,262 01
June	833 94	1,553 62	-	975 13	1 50	3,364 19
July	991 73	1,880 18	470 00	975 08	-	4,316 99
August	710 14	1,829 85	-	975 10	-	3,515 09
Sept'ber	620 77	2,051 46	-	975 07	-	3,647 30
October	972 06	1,710 25	-	975 09	-	3,657 40
Nov'ber	1,536 61	1,690 49	-	975 11	-	4,202 21
Dec'ber	1,375 32	1,170 47	-	975 10	-	3,520 89
	7,988 88	15,849 65	4,070 77	11,713 59	3 50	39,626 39

Add pay of president, directors, chief engineer, and officers at Frederick - - - \$6,670 00

Office rent, postages and charges, printing and stationery, law and other charges, - - - 1,075 37

7,745 37

47,371 76

NO. 6.

OFFICE OF THE CHESAPEAKE AND OHIO CANAL CO.,

Frederick, December 18, 1844.

DEAR SIR: Being informed that you have recently returned from a visit to England, made with a view of examining and ascertaining the extent of trade and relative advantages of canals and railroads in regard to the cost of transportation, I have taken the liberty of addressing you this note, and of asking from you such information in regard to those subjects as it may be convenient to you to afford.

The public mind in this State is at present much directed to the question of internal improvements, in consequence of the efforts that are being made to obtain a law for the completion of the Chesapeake and Ohio Canal to Cumberland; and I think that much error of opinion prevails here, in reference to the subjects alluded to, which the result of your observations in England may probably dispel.

I will therefore esteem it a favor if you would furnish me with the information desired, which, with your permission, I purpose laying before our Legislature at its approaching session, now near at hand.

In addition to such other facts as you may see fit to communicate, I particularly desire to learn the result of the present competition between the canals and railway from Liverpool to Manchester; as also of that between the Taff Vale railway and Glamorgan-shire canal for the coal and iron trade of Wales.

An early answer will greatly oblige your obedient servant,

J. M. COALE,

President of the Chesapeake and Ohio Canal Co.

CHARLES ELLET, Esq., *Civil Engineer.*

PHILADELPHIA, *December 26, 1844.*

DEAR SIR: The subjects on which you have requested information are so comprehensive, and cover a field so wide, that I am unable to do justice to them in a communication of any reasonable length. I shall therefore be compelled to limit my remarks on the several points which you have suggested to the presentation of the most important facts bearing on the problem, in the form of memoranda, from which you can draw your own conclusions.

The question of the comparative cost of transportation on canals and railroads is one on which I have had frequent occasion to express my opinions; but, in the examination which I made this summer of the public improvements in England, I saw nothing to change the opinion which I had previously deduced from the data offered by the works of this country.

That the railways there have greatly reduced the value of canal property is not to be denied; and if the railroads had been first in the possession of the ground, and in the enjoyment of a monopoly of both the heavy and the light traffic of that populous country, and had been able under that monopoly to fix their own prices, it is equally certain that the construction of canals along side of them would have inflicted serious injury on their proprietors.

The canals of Great Britain had long been made on almost every line where there was trade to support or water to feed them, and in some places where there was neither of these inducements to authorize their construction.

As a general rule, the canals which were most needed were established first, and, being eligibly placed, they were eminently successful; and, notwithstanding the fact that every canal of any consequence in England now has a rail road alongside of it, these primitive canals are *still* successful. Those of more modern construction have generally suffered much more in their competition with the rail roads.

The cause of this difference is clear. Any canal located through a highly cultivated and densely peopled country, abounding in wealth and manufacturing establishments, and enjoying the exclusive monopoly of its trade, will necessarily, under good management and in ordinary circumstances, prove to be highly productive of property. Its trade will usually consist of a great variety of commodities; it will carry coal and oars from the mines to the furnace, pigs from the furnace to the forge, and bars and hardware from the forge to the seaport. It will carry wool and cotton to the factory, and manufactured goods thence to the market; corn to the mill, and flour to the shipping. Its trade will consist in fact of every commodity consumed or produced in the district through which it passes.

The tolls levied on this tonnage will be low on some articles and high on others—graduated with a view to the greatest profit to the company; but the great bulk of the trade will consist of those commodities which will bear but moderate charges. Still the valuable products of the manufacturing establishments, in consequence of the high charges assessed on them, will generally yield a very important portion of the revenue.

If, in this state of things, the rail road is located through the same region, and between the same extreme points, the lines of the two works in some places coming in contact or crossing each other, and in other places deviating a few miles, it may do the canal proprietors very serious injury, and that, too, without materially aiding its own. The actual cost of *freight* by the rail roads is perhaps three or four times as high as the actual cost of conveyance on the canal; but yet, by carrying goods at cost, or but little above cost, it will either strip the canal of those articles from which it previously received the greatest amount of *toll*, or compel the

company to reduce their charges materially, in order to retain them. And, besides, as the rail road touches some points, or passes through some towns not immediately on the bank of the canal, it will offer peculiar facilities for those places; and, though it may charge twice or more than twice as much per mile as the canal transporters charge, it may yet, by relieving the shippers of the cost of transshipment and land carriage on a lateral road, deliver goods at those particular places at a less aggregate cost than they can be delivered there by the canal.

If, now, the trade of the canal were of a miscellaneous description, and small withal, and the company barely able to meet their expenses and interest, and declare a meager dividend, and a rival of this sort were suddenly laid alongside of it, which, at the same time, would draw off the most valuable commodities and reduce the charges on the balance, (the expenses and interest of the company remaining still the same) it is easy to imagine that there would be but little left for the stockholders' profit, and that the shares would necessarily fall.

But if the canal, thus situated, had possessed a vast trade, such as is found on some of those of early date in England, it might be able to part with a portion of these high-priced commodities, without suffering greater loss than could be compensated for by an improved economy in the administration of the company's affairs, or, perhaps, by the increase of business in heavy freight, which would be produced by the railway itself, and the competition excited by its presence.

There are numerous examples of both these cases in various parts of England.

On the great line from London to Liverpool, we have, first, the case of the Grand Junction Canal, and the London and Birmingham Railway.

This rail road was constructed at a cost of more than \$30,000,000, and is the most perfect specimen of a rail road which has yet been produced. The highest grade (if we overlook a plane at the London terminus, which is used only for passengers) is sixteen feet per mile. The rails are of the most substantial description, and weigh about seventy-five pounds per yard, and are intended to reverse when the upper table is worn off. The bridges are of stone, and the superstructure is founded on a bed of gravel ballast two feet in thickness, from one end of the line to the other.

The washing of the slopes is adequately guarded against by a well cultivated sod, and the drainage appears to be perfect. The canal is old, and in every respect inferior to the best canals of this country.

In the construction of the rail road, there could be but one object in encountering the vast outlay that was necessary to bring these grades down to sixteen feet per mile, viz: to reduce the cost of transporting the heavy freight passing between London on the one side, and Birmingham, Manchester, and Liverpool, on the other.

The result of the competition is given in a few words:

The canal actually carries an annual trade of	1,500,000 tons.
The rail road conveys about	150,000 " " "
The <i>increase</i> of trade on the canal which has had place since the completion of the railway, is equal to the whole quantity abstracted by the railway, or	150,000 " "

But, notwithstanding these facts, the price of the canal shares has been greatly reduced since the completion of the railway—a circumstance of which I have already given a general explanation. The 150,000 tons actually carried by the railway consists mainly of those commodities which paid the highest rates to the canal, while the coal and other cheap and bulky articles received in compensation are those on which the lowest rates are assessed. The £100 shares, however, still stand at £162.

Another important case, of the same character, is found on the extension of the same navigable line from Birmingham to Liverpool. Here, the Grand Junction Railway has been laid parallel with the old Grand Trunk Canal.* This railway is likewise one of the first in importance and excellence in Great Britain, though the consideration of expense was permitted to have some influence in the determination of the grade line. The steepest inclination is sixty-one feet per mile.

The road is eminently prosperous, and its stock stands at £221 for £100 paid.

The stock of the canal, parallel with it, stands at £990 for £100 paid. The last dividend was sixty-five per cent. per annum.

This railroad, like the London and Birmingham, (of which it is the continuation,) is sustained essentially by its passenger traffic. The London and Birmingham conveys about 800,000 persons, and the Grand Junction about half that number, annually; and they receive for this duty about an average of five cents per mile, or seventy-five cents per ton per mile.

South of the Grand Junction Railway, and frequently in sight of it, runs another canal, which is becoming one of the most interesting in the Kingdom, as the line on which the application of steam to the tugging of boats, in trains, was first successfully made. This work, (the Birmingham and Liverpool Junction Canal,) and its competitor, the Grand Junction Railway, both went into operation about the same time, and became at once competitors with each other, and joint competitors of the Grand Trunk Canal. This canal and railway had an equal chance to seize upon the trade of their common rival, and the new trade which they created. The canal now carries nearly 400,000 tons per annum, and the railway about the fourth part of that quantity. The railway shares, however, stand higher than those of this canal, and for the reason already given—its vast passenger traffic.

The canals between London and Bristol, which come into com-

*The Trent and Mersey.

petition with the Great Western road, have suffered much more seriously. Having never been very profitable, nor in the possession of a heavy traffic, when a portion of what trade they had was taken from them, they were left with all their former charges standing against them, and at the same time with diminished receipts. Their shares have of course fallen.

It is (in fact) most obvious, that a canal, relying, as many of those of Great Britain, on the transportation of manufactured goods, cannot sustain itself without great loss by the side of a railway capable of saving in the item of interest on the value of goods, by the increased speed which it affords, more than the value of the difference in the cost of transportation. There are thousands of tons of goods sent from a manufacturing district, of which the value is not less than \$10,000 per ton. The interest on that capital is equal to *seven cents per ton per hour*. For such goods, time is therefore an important element. But if the article were coal, worth three dollars a ton, this element would be worth but the five hundredth part of one cent per hour—a quantity wholly inappreciable.

The great merit of a railway, for the conveyance of travellers and general merchandise, is its speed; and the great advantage of canals is their ability to carry the heavy products of the earth at a cheap rate—and it is this ability which in England has preserved the whole system from prostration, and which appears destined for all future time to class these works among the most useful of the inventions of civilization.

It is by no means surprising that the public mind should be carried astray by the performance of modern railroads. A railway is, emphatically a noisy thing, and is withal calculated, by the prodigious display and force of its machinery, to excite admiration and applause. Besides, it is the line of travel, and the public who are carried along it have little opportunity, if they were interested in such speculations, to compare its merits, and the benefit which it affords to society, with that which is offered by the canal boat, which it leaves behind.

There are few travellers who pass from Liverpool to Manchester, who ever stop to inquire whether there is any other route by which those cities have commercial intercourse, or whether the railroad is not the only line of trade and travel between them. And yet the railroad over which they are hurried is but one of seven great avenues leading from the interior to the Liverpool docks.

To understand the situation of things at this point, a good map is desirable; but I must endeavor to make myself understood without that assistance.

There is a continuous railroad from Liverpool to Leeds, which passes through Manchester; and of which the Liverpool and Manchester road forms a part.

On the north side of this line is the Leeds and Liverpool canal, with a branch belonging to another party, running to Manchester.

This Leeds and Liverpool canal is mainly supported by its coal

trade, which it obtains from the mines in the neighborhood of Wigan. When the Liverpool and Manchester railroad, and the North Union road, which may be regarded as one of its arms, were opened, these roads offered a shorter route from this coal field to Liverpool than the old route by the canal, and the confidence of the canal proprietors was somewhat shaken in their ability to retain the trade.

Twelve years' experience has settled that question, which was a very important one in its day.

The Liverpool and Manchester road now has an annual trade of about 180,000 tons.

The trade of the Leeds and Liverpool Canal in 1832, just after the opening of the railway, was as follows:

Coal tonnage,	330,000 tons.
Merchandise, &c.,	142,000 tons.

Aggregate trade in 1832, 472,000 tons.

The trade in 1843 was—

Coal tonnage,	600,000 tons.
Merchandise,	156,000 tons.
Flags, &c.,	45,000 tons.

Aggregate tonnage in 1843, 801,000 tons.

The increase of trade on the canal, computed from the time when the railroad had been two years in operation, is nearly equal to twice the aggregate trade on the railroad. The canal shares of £100 now stand at £650.

The canal here alluded to is on the north side of the railway. On the south side there are *two* water lines connecting Liverpool and Manchester, which run many miles very close to the railroad, and, I believe, in no place are more than six miles distant from it.

The length of the railroad is 31 miles.

The distance by the Mersey and Irwell navigation, (a lock and dam improvement,) from Liverpool to Manchester, is about fifty miles.

I am unable to state the number of tons which pass along this navigation, though I am confident it is two or three times as great as the tonnage of the railroad. The improvement is now the property of Lord Francis Egerton, who purchased it about two years ago, for the purpose of controlling the tolls.

Some idea of the value of the work may be formed from the market price of the shares, which at the time of the sale were quoted at £300 for £100 paid.

Within bow shot of the Mersey and Irwell, and connecting the same cities, Liverpool and Manchester, is the "Duke of Bridgewater's canal," now also the property of Lord Francis Egerton.

This being a private work, there are no published statements of the amount of traffic upon it; but, from information which I obtained at Runcorn, from persons who had the best opportunity of

knowing, I estimate it at about 1,600,000 tons. In travelling in a packet from Manchester to Runcorn, a trip of five hours duration, I counted no less than 93 loaded boats in motion, of which 68 were ascending and 25 descending.

I was informed by the agent that the tonnage had increased about 10 per cent. since the opening of the railroad.

If the railroad does not carry a vast trade between these cities, it is not for want of opportunity. The trade is there, ready to take the route which offers the greatest aggregate economy; and though the distance by either canal is 55 per cent. greater than by the railway, the economy is on the side of the canal.

Still it is not to be doubted that the railway might take the trade of all these works, if the stockholders were willing to convey it at a loss, and make up the deficiency from their own pockets. There are but two or three cases within my knowledge where the peculiar circumstances of the railroad are such as to render that movement in the eyes of the stockholders compatible with good economy.

On the Duke of Bridgewater's canal, as on many others in England, the competition maintained by the canal for the conveyance of passengers is quite equal to that which the railway carries on for the goods. No less than twelve packet boats leave and arrive at Manchester daily by this line, besides three by the Mersey and Irwell, making altogether fifteen out and in daily, and all generally well filled. I was informed by the captain of the boat on which I travelled, that the number going by the canal this year is greater than in any previous year.

The canals of the midland counties offer numerous evidences of the fact to which I have already alluded, of the little appreciation of the public of the magnitude of the traffic of the English canals. The railways are the great lines of travel, and, by the magnificence of their arrangements, and the speed and power of their machinery, force a continual expression of admiration. The canals are seen only by the boatmen and by the poor wayfarer, to whom they offer for a shilling what the railroad will give for a crown, and who are not in a condition to keep the value of the benefit continually before the public eye.

In 1816 the quantity of coal passing along the various canals of the midland counties was estimated at about 10,000,000 tons. Since that period, the coal trade of Great Britain has nearly doubled, and the coal from the mines in these counties has been pushed nearer to the seaboard—but I have no more recent estimate of the value of that portion which is carried on these canals. It must have greatly increased, though probably not in proportion to the increase of the aggregate trade. I cannot conveniently sum up at a brief notice the tonnage conveyed on all the railroads in the same district; and every canal there of any importance now has a railroad alongside of it; but I hazard nothing when I say that their aggregate tonnage in articles of every description does not amount to one million of tons.

In regard to the competition now carried on between the Taff Vail Railway and the Glamorganshire Canal, both leading from the docks at Cardiff to Merthyr Tydvill, to which your inquiries point, the following are the essential facts.

These works are competitors for the coal and iron trade of South Wales, or at least for a very important portion of it. Both lines are about $25\frac{1}{2}$ miles long. The elevation overcome by the railway is 543 feet, and that is also the lockage of the canal. In one mile there are sixteen locks on the canal. The same fall is accomplished on the railway by an inclined plane.

The following are the rates of toll by canal:

Iron, per ton per mile	-	-	-	$\frac{3}{4}d.$
Coal, stone, slates, ore, &c., per ton per mile	-	-	-	$\frac{1}{2}d.$

Under the operation of these rates, the canal has always paid eight per cent. per annum dividends, to which the company are restricted by act of Parliament.

The boating is done by private individuals.

The rates on the rail road, *for use of road*, are:

Iron, per ton per mile	-	-	-	$1d.$
Coal, per ton per mile	-	-	-	$\frac{2}{3}d.$

For locomotive power there is an additional charge of $\frac{1}{2}d.$ per ton per mile. The freighters of iron and coal find their own wagons, which charge is there estimated at $\frac{1}{4}d.$ per ton per mile.

The stockholders of the railway get no dividend, though the company meet the interest on their loans.

In 1843, the tonnage of the canal was:

Iron	-	-	-	104,138 tons.
Coal	-	-	-	206,359 tons.

The amount carried on the rail road the same year was:

Iron	-	-	-	44,843 tons.
Coal	-	-	-	152,100 tons.

The charges both on the canals and rail roads of England, measured on our scale, are generally high. The works, though extravagantly built, appear to be economically managed; but still they adhere with tenacity to a system of liberal charges. I would say, the average rates for the conveyance of goods on rail roads is about six cents per ton per mile; and the average on canals, including every thing, about three cents. There are, indeed, some few roads, where the trade is great and the competition active, that have attempted a much lower scale; and of these, the Stockton and Darlington is the most conspicuous. But, in comparing this road with those of the United States, we must not overlook some peculiarities which belong to it, which greatly increase its ability to transport freight at minimum charges.

Its grades are exceedingly good, the maximum being 51 feet per mile, and close to the port. The inclinations are all in favor of the heavy trade, the empty cars only having to ascend the slopes. There is no inclined plane on the main line. The construction of the work throughout the line is equal to that of the modern English railways generally. The track is built most substantially,

and the rails are of a heavy pattern, and of a form which is now most approved, viz: the hour-glass shape, and made to reverse. The bridges are all of stone or iron, and have been constructed apparently with an eye to the interest of posterity. The arrangements for discharging the coal are as perfect as the most fastidious mechanic could desire. An admirable dock has been constructed at Middleborough, and the coal is placed on board of the vessels at ten distinct drops or staiths. There are generally three tracks leading down to each drop, though I believe that in one or two instances there are more. There are, accordingly, thirty distinct tracks at the Middleborough end of the line, where the trains stand while the coal is discharged. The whole line is provided with a double track and ample turn outs, and every convenience than can be needed for reducing the charge of agents and avoiding accidents.

The locomotives are plain and cheap, and the cars are both light and substantial. The cars carry twice their proper weight of coal, and weigh, with their loads, but four tons, or one ton on each wheel. The cost of cars on springs is about £19; those without springs cost £14.

The coal cars now most approved are of wood, with wrought iron frames. The average nett load is now about 160 tons. The speed is limited by express injunction to six miles per hour, though it is difficult to enforce the regulation strictly.

With these advantages, and a large and well organized trade, they think they are able to work cheaper than any other railway in England,* and they certainly do carry on their vast operations with remarkable economy.

The lowest charges on this road are for "seaborne coals," which are carried an average distance of twenty-four miles. To state the charges on each ton, so that they can be understood, we have to make the following calculation: The rates on this class are:

For "road dues" on 24 miles, at $\frac{1}{2}d.$	-	-	-	12d.
For use of wharves	-	-	-	1
For shipping	-	-	-	1
For crossing bridge over Tees	-	-	-	1
For passing through the tunnel	-	-	-	9
For locomotive power, 24 miles, at $\frac{1}{3}d.$	-	-	-	3
For use of cars, 24 miles, at $\frac{3}{16}d.$	-	-	-	4½

Total charge on one ton, charried 24 miles - 31½

Which is equivalent to 2½ cents per ton per mile.

It is not to be assumed that any of these charges, excepting that for the use of cars, are proportioned to the value of the items on which they are levied. To understand the rates, you are to look at the whole charge on a ton; the arrangement of the items, or

* The Clarence Railway Company, the immediate competitor of the Stockton and Darlington, and which carried more than 400,000 tons of coal per annum, has just failed.

the distribution under the several heads, is governed by certain considerations of policy, and are permitted by the peculiarities of an old charter. For instance, they formerly charged $\frac{1}{2}d.$ per ton per mile for locomotive power, on coals of every description. By reducing that item on "sea sales coals" to $\frac{1}{4}d.$, and adding $3d.$ to the charge for passing through the tunnel, (which was formerly $6d.$,) they are enabled to tax the coal that passes through their tunnel and afterward over the Clarence road $3d.$ more than they could under the former arrangement. This is the lowest rail road tariff I have met with in any part of Great Britain.

On the "land sales coals" they charge as follows :

For "road dues," say 27 miles, at $1\frac{3}{4}d.$	-	-	-	-	27 $\frac{1}{2}d.$
For passing tunnel	-	-	-	-	9
For locomotive power, 20 miles, at $\frac{1}{4}d.$	-	-	-	-	5
For use cars, 20 miles, at $\frac{3}{8}d.$	-	-	-	-	3 $\frac{3}{4}$

Aggregate for 20 miles - - - - - 45 $\frac{1}{2}$

Which is equal to about $4\frac{1}{2}$ cents per ton per mile. The charge on other portions of the "land sales coals" is more than five cents per ton per mile.

The aggregate charges on miscellaneous freights range between 6 and 9 cents per ton per mile.

The fares for passengers are: first class $2d.$, second class, $1\frac{1}{2}d.$, and third class $1d.$ per mile.

The road is by no means entirely sustained by its coal trade, though the great bulk of its tonnage consists of that article.

The average traffic of this work for the last few years may be stated as follows :

"Land sales coals,"	-	-	-	-	300,000 tons.
"Sea sales coals,"	-	-	-	-	470,000 tons.
Miscellaneous freights;	-	-	-	-	40,000 tons.
Passengers,	-	-	-	-	325,000 persons.

This, I believe, is the heaviest business that has ever yet been performed by any railroad in any country.

As might reasonably be anticipated, this vast traffic has been very trying to the road. The rails first laid down weighed but twenty-eight pounds per yard. The next pattern was a little heavier, and weighed thirty-two pounds. This was not found to be adequate to the duty, and was, in course of time, superseded by a new pattern, which weighed forty pounds per yard. Experience decided against this also; and, as it began to give way, a fifty pound bar was put in its place. Some few of the fifty pound rails are still on the road; but they were not found to be equal to the service required, and were superseded, as they gradually wore out, by a sixty pound pattern. There are many of these sixty pound rails still in use, but the greater portion of the road is now supplied with the "double parallel" pattern, weighing seventy-three pounds per yard.

The destruction of rails since the first opening of the road I could

not ascertain with satisfactory precision ; but I think it is equal, on the main stem, to eight or nine entire tracks.

The road was opened in September, 1825 ; in the year 1829, the trade had amounted to about 80,000 tons per annum, and it is now about 800,000 tons.

A brisk competition is kept up between various canals and railroads for the conveyance of passengers. On the old Birmingham Canal—a channel literally thronged with boats loaded with coal and iron, and the various products of the manufacturing establishments of Staffordshire, and of which the original shares of £140 are now worth £2,770, a competition is steadily maintained between the packet boats and one of the finest railroads in the world, for the conveyance of passengers between Birmingham and Wolverhampton. On this canal, there are four daily packets each way, which are well supplied with passengers.

Six daily packets, with frequent extras, pass in each direction between Edinburgh and Glasgow, along the Forth and Clyde Canal, in Scotland. The Edinburgh and Glasgow railway, with which the competition is maintained, is wanting in no element of an excellent and admirable railroad. It was established at a cost of \$175,000 per mile, and every precaution which art could supply was taken to render it efficient and convenient. For the purpose of breaking down the canal, the prices of freight are put exceedingly low, and trains are sent through with four different classes of passengers, with fares corresponding with the comforts allowed them. But still the canal fares are lower than their lowest rates, and the packets are consequently crowded. There were more than one hundred persons in the boat in which I travelled, and the number left on the landing was sufficient to justify the Company in sending them on by an extra.

The competition which formerly had place on a little canal connecting the towns of Paisley and Glasgow, and the Glasgow, Paisley, and Greenock Railway, has ceased by compromise. The Canal Company no longer carry passengers, and the railway has also ceased to carry freight, excepting only packages of one hundred pounds or less weight.

In addition to this, the railroad Company pays the Canal Company a consideration equivalent to about \$1,000 per mile per annum, for withdrawing its passenger boats. The canal carries heavy freight without molestation, and the railroad enjoys the monopoly of the passengers.

This is the most sensible arrangement that I have yet heard of, in similar cases. It confines each work to its appropriate business ; and the railway being the interloper, and attempting to monopolize the whole trade, ought, in justice, to pay something for the privilege of continuing its legitimate traffic without interference.

On the route from Lancaster to Preston, the competition for both freight and passengers has also ceased. The canal was of much larger dimensions than the English canals generally. While the strife continued, the swift packets not only took the passengers

from the railway, but kept the charges so low for those actually carried by the railway, that the company, after several years' fruitless labor, were compelled to abandon the unprofitable contest; and accordingly leased their road, which had been constructed at great expense, and in superior style, to the Canal Company.

The most indifferent canal can always sustain itself, *for any sort of traffic*, against the competition of rail roads, if the contest be carried on with proper intelligence and spirit. But if men lie down on the track, they may count with considerable certainty on being crushed.

There is one important circumstance that should not be lost sight of, in any comparison that may be drawn between the canals and rail roads in competition in England, and those in this country.

The English canals are generally very small, with locks capable of passing boats of but $7\frac{1}{2}$ feet beam, and 65 or 70 feet long. The American canals, with few exceptions, are in every respect larger and better.

The English rail roads, on the other hand, are the product of the greatest effort of art, with an unlimited command of means; and are incomparably superior to any results which we have obtained, or are likely for a long time to obtain, in this country.

The pretensions which are sometimes set up for the superiority of our rail road machinery over that of the rest of the world is not, in my opinion, fully sustained.

There is no country in which machinery, of all descriptions, is better made than it is in England. But the difference between us is, that they, having unbounded means, expend vast sums in the graduation of their roads; while we, with limited resources, cannot afford to bore through the hills, or cut them down, and are compelled to pass them by steeper grades. To surmount these grades we are obliged to make a different machine, and obtain the adhesion of its whole weight. To avail ourselves of the advantage of that adhesion, we work our engines under a high pressure of steam—and we sometimes burst them. In England, the laws for the protection of the lives of citizens are more rigorously enforced, and companies cannot trifle with them with the same impunity. This consideration, added to the fact that the canals take the heavy trade, and leave the rail roads but passengers and light merchandise, sufficiently explaining why their locomotives usually draw less weights. On the Stockton and Darlington Road, where the grades are favorable, and the heavy articles are not abstracted by the canals, the trains are very heavy.

In examining the railways of Belgium, which are remarkable, as well for their general success as for the economy of their administration, some opportunities were presented for inspecting, also, the condition of the canals of that country. Many of the Belgian canals, and all of the rail roads, belong to the government. They use the railways for the transportation of passengers, and the canals for the transportation of freight. It is true, that there

is some freight carried also on the railways but the average amount conveyed on all these roads is but about 25,000 tons per annum.

The produce of the coal mines of Belgium is about 3,500,000 tons per annum. A great deal of iron is made in the country, and the soil is as productive as that of the very best parts of England.

The produce of the soil, the mines, and the factories, are carried on the canals. The branch roads leading from the mines cross the great railways, and deposite the coal in the canal boats. Some 600,000 tons of coal are carried into Flanders and Holland, and about the same amount into France, by the canals, and the rivers rendered navigable for canal boats, leading in those directions.

The canal from Charleroy to Brussels was opened in 1833, and conveyed 175,000 tons of coal.

The canal of the Sambre and the Oise was opened in the beginning of 1839.

On the subject of new canals, I may state that the experience of Europe in the use of modern railways has by no means set all such projects aside, though nearly all available ground has been long since occupied.

In the month of August last, tenders were to be received for the construction of the canal from the Scheldt to the Meuse, the expense of which was estimated at one million of florins.

A law was passed at the last session of the French Chambers, appropriating the sum of 7,000,000 for the Marine and Rhine canal, between Vitsy and Nancy; and 6,000,000 besides, for a lateral canal to the Garonne.

In England, the old Birmingham Canal Company opened a new canal some thirteen miles in length, the route of which does not deviate materially from their old line, and the object of which is to relieve the locks on their work from the pressure of the boats which constantly throng the canal. There are five magnificent lines of rail road leading out of Birmingham, one of which runs parallel with this canal, and each of which may be regarded as the competitor of some one of its great arms. But these rail roads do not subserve the purpose of relieving the trade, which consists mainly of those coarse commodities that require the economy of canal transportation.

In regard to the important but vexed question of the relative economy of railway and canal transportation, there would be little difficulty in deciding it to the satisfaction of all minds, if we could bring the problem down to a mere question of experience and results actually obtained. But it is now rarely presented in this way. On the one hand, we have the known and admitted cost of freighting on canals, and this we have to compare with the *estimated* cost on certain works on which it is essential almost for their existence to make the estimate low. It is a comparison of facts on one side with surmise on the other.

I have never yet heard of but one rail road company that pretended to be able to pay their actual expenses for less than two cents per ton per mile,* though there have been several instances of an intention at some future day to work cheaper than that. Until the thing is accomplished, *we are compelled to assume two cents per ton per mile as the present minimum of railway expenses.* Half a cent per ton per mile, though below the average, is not the minimum of the cost of freight on a good canal with horse power.

But, after all, past experience on this head is of much less value than is generally supposed. A new element has been introduced into the question of canal navigation. The use of steam, even on small canals, has set all our former calculations aside, and completely changed all the data of this problem.

On the Birmingham and Liverpool Junction Canal, steam tugs have been more than a year in constant operation carrying on the trade by drawing boats in regular and long trains. The canal is of small dimensions, and presents numerous impediments to the success of the experiment. The cross section is small, the locks narrow, the line crooked, and the bridges frequent and low.

Your canal, on the contrary, has all the advantages of an ample depth and breadth, capacious locks, freedom from the obstruction of bridges, and moderate and well developed flexures. Notwithstanding the impediments on the English line, success is complete; and there can be no doubt that, with your advantages, and a large and steady trade in addition, it will be still more striking. On the English line, from six to ten boats are taken in a train; on yours, two or three would be sufficient.

I am not well informed in respect to the tonnage of the boats of the Chesapeake and Ohio Canal; but I presume that, in estimating their capacity at about 90 tons, I shall be within the limit. A small engine, say fifteen or twenty horse power, placed in one of these boats will move it, with two other boats of equal burden in tow, at three miles per hour.

The capital required will be—

For three boats, at \$1,000 each	-	-	-	\$3,000
For a twenty horse power engine	-	-	-	2,000

Aggregate capital required for transporting 250 tons	<u>5,000</u>
--	--------------

To convey this amount of freight on a rail road will require—

A twenty ton locomotive, at	-	-	\$10,000
Fifty cars of five tons each, at \$300	-	-	15,000

Capital in an equivalent train	<u>25,000</u>
--------------------------------	---------------

* I do not wish to make any invidious remark in this paper; but the accounts of the only work professing to carry at an actual cost for less than two cents per ton per mile are not so published as to justify any public confidence in them.

The construction of the boats is so simple that they can be kept almost constantly running. No extras are required, no change of engines, and no double or treble sets of cars. But, leaving out of view all such considerations, let me ask, will the wear and tear of three boats resting on a perfectly elastic cushion, smooth water, be equal to the wear and tear of a locomotive engine and fifty cars jolting and thumping along a railway at the rate of seven or eight miles per hour?

A steam tug, with its train of six boats or more, is now actually managed in England by three men—an engineer, a conductor, and a steersman. There certainly will not then be required more than three men on your canal to take charge of three boats.

On a locomotive and its train there are required an engineer, a conductor, two firemen, and four breakmen; and still more, to keep the train in proper command, if the grades are steep.

There are needed no agents on the canal, besides the ordinary superintendents and lock tenders.

On the London and Birmingham Railway, (112 miles long,) there are employed 1,395 persons, besides about 900 "waymen," whose duty is to keep the permanent way in repair.

It is true, that this is the force required for the performance of a great duty. But what is the duty of conveying 150,000 tons of freight and a million of passengers, *compared with the future transportation of the coal and iron with which the mines of Maryland are charged?*

The doubts that are thrown upon the probable extension of the coal trade of this country remind me forcibly of the times when a famous English writer feared that they might some day have to use coal in England, "if wood be not better cherished than it is at this present," and that "*sea coles* would be good merchandise, even in the city of London, whereunto some of them had already gotten ready passage."

The like fortune awaits the coal of Pennsylvania and Maryland; but with this difference, that a very few years, in this country, accomplishes the work of a European century.

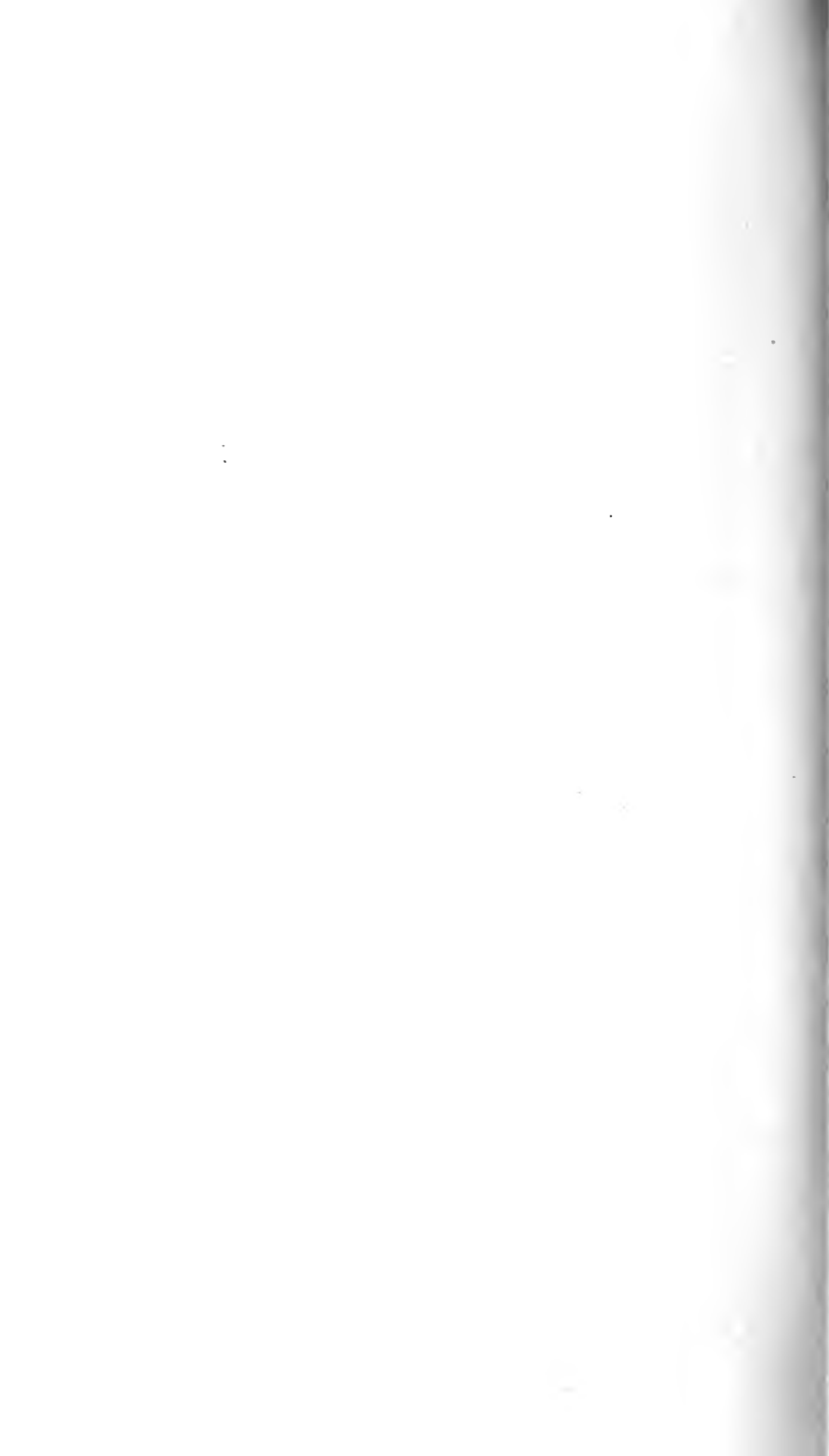
This subject has extended much further than I anticipated when I commenced, though I have endeavored to limit my remarks to the most apposite facts. I cannot well compress it within narrower compass, without writing it over again, which my present engagements would not permit.

I have the honor to be, respectfully, your obedient servant,

CHARLES ELLET, JR.,
Civil Engineer.

J. M. COALE, Esq., Pres. Ches. and Ohio Canal Co.





UNIV. OF MD COLLEGE PARK



3 1430 03833049 6

15

MAY 75

N. MANCHESTER,
INDIANA

